United Nations A/63/170

General Assembly

Distr.: General
24 July 2008
English
Original: Arabic/English/French/
Spanish

Sixty-third session
Item 91 (p) of the provisional agenda*
General and complete disarmament

Effects of the use of armaments and ammunitions containing depleted uranium

Report of the Secretary-General

Summary

The present report contains views of Member States and relevant international organizations on the effects of the use of armaments and ammunitions containing depleted uranium. The Secretary-General has, to date, received 17 reports from Governments and from the International Atomic Energy Agency and the World Health Organization.

* A/63/150.

08-43880 (E) 130808 140808

Contents

		Page
I.	Introduction	3
II.	Replies received from Governments	3
	Andorra	3
	Argentina	3
	Austria	4
	Belgium	4
	Bosnia and Herzegovina	4
	Canada	7
	Cuba	8
	Finland	12
	Germany	12
	Japan	13
	Mali	14
	Netherlands	14
	Qatar	15
	Serbia	15
	Spain	17
III.	Replies received from agencies and organs of the United Nations system	20
	International Atomic Energy Agency	20
	World Health Organization	22

I. Introduction

1. The General Assembly, in paragraph 1 of its resolution 62/30, requested the Secretary-General to seek the views of Member States and relevant international organizations on the effects of the use of armaments and ammunitions containing depleted uranium, and to submit a report on the subject to the General Assembly at its sixty-third session.

2. On 15 February 2008, a note verbale was sent to Member States requesting them to submit their reports by 31 May 2008. The Office for Disarmament Affairs also submitted a request to the International Atomic Energy Agency (IAEA), the United Nations Environment Programme (UNEP) and the World Health Organization (WHO).

3. To date, the Secretary-General has received 17 replies from Governments, IAEA and WHO, which are reproduced below. Additional replies received from Member States will be issued as addenda to the present report.

4. Owing to the page limit for the report, information of a general scientific nature contained in national submissions has not been reproduced. The full texts of the submissions and additional information attached thereto are available for consultation at the Office for Disarmament Affairs.

II. Replies received from Governments

Andorra

[Original: French]
[1 March 2008]

Andorra has no army and possesses no weapons of mass destruction. The Government of Andorra condemns the use of any type of weapon of mass destruction.

Argentina

[Original: Spanish]
[1 July 2008]

1. To date, various agencies have done studies on the secondary effects of the use of armaments and ammunitions containing depleted uranium on the health of the population and on the environment. The studies describe specific scenarios in which the risk to the population could be significant, and they recommend precautionary measures in the areas in question.

2. These studies recommended more in-depth comprehensive measurements and analyses, but they were never done. Nevertheless, it is believed that the information in the studies provides a sufficient basis for questioning the continued use of such armaments and ammunitions until their secondary effects are reliably determined.

3. It is our belief that the precaution should be taken to ban further use of armaments and ammunitions containing depleted uranium as long as it is not known

how they may affect the health of the population and the environment. Once that moratorium has been established, a group of governmental experts could be convened to consider the subject comprehensively.

Austria

[Original: English]
[15 April 2008]

Austria does not possess any weapons, armaments or ammunition containing depleted uranium. With regard to the possible effects of the use of armaments and ammunitions containing depleted uranium Austria is guided by the relevant research/studies undertaken by the World Health Organization (WHO).

Belgium

[Original: French]
[6 June 2008]

1. Pursuant to the Belgian Act of 11 May 2007 prohibiting depleted uranium weapons systems, which supplemented the Weapons Act, inert munitions and armour plating containing depleted uranium or any other type of industrial uranium are now classified as proscribed weapons. The Act was published in the *Moniteur belge* of 20 June 2007 and will enter into force two years later, on 20 June 2009.

2. Parliamentary hearings with contributions by scientific experts were held before the Act was adopted. Various points of view were expressed regarding assessment of the risks to health and to the environment posed by the use of cluster munitions. The Belgian legislature in the end made a political judgement, taking into account the absence of scientific consensus on the effects of depleted uranium while also applying the precautionary principle that calls for a cautious approach in the absence of full scientific certainty.

3. Belgium will closely follow all developments in the scientific analysis of the risks associated with the use of depleted uranium weapons systems and is ready to provide the United Nations with any necessary clarification of the definitions, aims and modalities of the Belgian Act of 11 May 2007.

Bosnia and Herzegovina

[Original: English]
[24 April 2008]

Background

1. Uranium ammunition was used in the Bosnia and Herzegovina war against the forces of the Army of the Republika Srpska on 5 August 1994, and on 22 September 1994, as well as in the period from 20 August to 14 September 2005. A total of 10,800 pieces of ammunition were fired, which corresponds to approximately 2.9 tons of uranium. In 1999, the United States of America officially recognized use of this ammunition in Bosnia and Herzegovina.

2. UNEP conducted a mission in Bosnia and Herzegovina from 12 to 24 October 2002, visiting 14 locations. Of the 14 locations examined, the presence of depleted uranium in the soil was detected at 3 locations, where almost 300 points of contamination were found.

3. UNEP experts selected the locations as potential spots of activity involving ammunition with depleted uranium by the North Atlantic Treaty Organization (NATO) forces during the Bosnia and Herzegovina war, on the basis of information from the local authorities, incomplete NATO data on the places of activity and previous examinations. The results and analyses of the results obtained from the field and laboratory work were presented in the publication "Depleted uranium in Bosnia and Herzegovina: post-conflict environment assessment", issued in May 2003. The field and laboratory work found the presence of remnants of ammunition containing depleted uranium at three locations, specifically at the technical institute in Hadzici, at the Zunovnica barracks and at the artillery weapons depot in Han Pijesak. The publication also contains recommendations intended for the relevant State institutions for further action related to depleted uranium on the territory of Bosnia and Herzegovina.

4. Taking into account the administrative structure of Bosnia and Herzegovina, the official data from the competent health ministries of the Federation of Bosnia and Herzegovina and the Republika Srpska are presented separately.

Federation of Bosnia and Herzegovina

5. The Federal Civil Protection Administration made an action plan in 2003 aimed at measuring radioactive radiation and harmful waste on the territory of the Federation, which was adopted by the Government.

6. From 1 September to 6 November 2003, experts from the Public Health Institute of the Federation of Bosnia and Herzegovina, Centre for Protection against Radiation, an integral part of the Federal Civil Protection Administration took field measurements and collected samples for laboratory analysis at 37 locations in the Federation of Bosnia and Herzegovina. The results of the field and laboratory work confirmed the existence of radiological contamination at two locations only, the technical institute in Hadzici and the Zunovnica barracks. Both cases involved remnants of ammunition containing depleted uranium.

7. The field work at the technical institute in Hadzici found some 200 spots of local contamination with depleted uranium. According to the UNEP mission data, one part of the ammunition containing depleted uranium was picked up, removed and stored outside of Bosnia and Herzegovina, while the other part was stored at a temporary depot of radioactive materials in the Federation. The ammunition compiled during the fieldwork of the RHB Unit of the Federal Civil Protection Administration was stored at a temporary depot of radioactive materials in the Federation.

8. The Public Health Institute of the Federation conducted tests to measure the presence of uranium isotopes in the waters in the Hadzici area during 2004 and 2005. In 2007, a three-year project entitled "Radiological monitoring of Hadzici" was approved with a view to obtaining data on the potential presence of depleted uranium in the Hadzici area and making an assessment of the potential risk to public health.

9. Owing to the presence of depleted uranium on the territory of Hadzici municipality, and its known soil, water and air contamination potential, thus harming human health through inhaling, direct contact or ingestion, the Public Health Institute proposed that periodic screenings be performed on a sample of approximately 5 per cent of the population of Hadzici municipality in relation to the consequences of the presence of depleted uranium. A project proposal entitled "Screening of the population of the Hadzici municipality for consequences of the presence of ionizing radiation" was approved in 2007, followed by more pilot research. As the data from the regular health statistics did not indicate any increased prevalence of malignant neoplasm on the territory of Hadzici municipality, an additional examination of the medical documentation at the Hadzici health centre was conducted. After the statistical processing of the results, the expert will recommend whether a need exists for further research concerning the presence of depleted uranium and its potential threat to public health.

10. No additional action was taken in the area of the Zunovnica barracks, because the terrain is mined and access is very risky. A full identification has never been done of all locations that have been exposed to ammunition containing depleted uranium or bear remnants of such ammunition (mined terrain, bullets deep in the ground, etc.). However, the presence of depleted uranium in the environment of Bosnia and Herzegovina was confirmed beyond any doubt, and its impact on both the environment and human health, today and in the future, cannot be assessed at present except partially for the territory of Hadzici municipality.

Republika Srpska

11. The headquarters of the Republika Srpska Army submitted to the Government of the Republika Srpska the expert report from the Nuclear Science Institute of the Federal Republic of Yugoslavia on the consequences of the activity involving ammunition containing depleted uranium at the Han-Pijesak barracks.

12. In the UNEP mission research in 2002, 14 locations in Bosnia and Herzegovina were examined, while 15 were not examined due to the presence of minefields. Depleted uranium was found at the tank repair facility and ammunition depot in Hadzici and at the ammunition depot and barracks in Han-Pijesak.

13. At these locations, clear and undoubted evidence was found of radioactive bullets and contamination spots on the soil and in the ground. Water contamination was found at one of these locations, air contamination was found at two of them and contamination was found in flora samples at three locations. Depleted uranium was not found at other locations examined. As time has passed since the use of ammunition containing depleted uranium and the penetrating bullets are deep in the ground, subject to corrosion, it would be more difficult to detect or pull them out of the ground. Additionally, adequate solutions have not been found for the issue of the adequate storage of radioactive bullets or segments of soil contaminated with radioactive dust.

14. Indeed, the uranium radioactivity was significant at the time of bomb impacts, and it affected human health either by inhalation of radioactive depleted uranium dust or by staying in the environment, so that there is a high probability of the effects of chemical toxicity of the isotope U-238 as a heavy metal on specific organs, or as an alpha radiation emitter, either internal or external.

15. Since the time of the bomb impacts, the dissolution of depleted uranium isotopes and their penetration into the ground have had a negative effect on the health of the population, flora and fauna and the environment as a whole, and will continue to do so in the future.

16. An expert study on the incidence of cancer in the mortality rate in the period 1996-2000 among some 4,500-5,000 people displaced from the territory of Hadzici, who settled in Bratunac municipality in 1995, found that:

(a) The mortality rate of the population coming from Hadzici was up to four times higher than that of the local population;

(b) The mortality rate of the population from Hadzici was up to 2.5 times higher than that of all other displaced populations in the municipality;

(c) The share of cancer was significant in the total mortality rate and was significantly higher among the residents coming from Hadzici than among other groups.

17. Additionally, the International Agency for Research on Cancer, Lyon, France, states in its reports that the annual incidence of cancer cases over recent years in the Balkans and in Bosnia and Herzegovina is on the increase, growing at an average annual rate of 2 to 5 per cent.

18. Once the impact of depleted uranium on human health and the environment is properly assessed, Bosnia and Herzegovina will need to develop adequate plans, secure budget funding, train staff and equip it with the required detector equipment and a laboratory for radioisotope testing.

19. Also, further research should be conducted in the localities where weapons and ammunition containing depleted uranium were used, as well as the localities that remain to be identified and searched. Prior to this, it is necessary to secure an adequate storage place for definitive disposal of the penetration bullets, radioactive dust and contaminated soil that have been found.

20. Furthermore, periodic preventive measures and regular checks of water, soil, air, flora and fauna for the presence of depleted uranium isotopes or radiation should be conducted at the selected locations, as well as scientific research to reduce the future impact of depleted uranium on the health of the population.

Canada

[Original: English]
[10 June 2008]

The health impact of depleted uranium has been extensively studied by specialists from around the world, and no study — including those conducted by UNEP and WHO — has found any definitive link between the use of depleted uranium in operational theatres and damage to human health. Therefore, there is currently no international prohibition on the use of depleted uranium. That said, the Canadian Forces have never used depleted uranium ammunition in operations or fired such ammunition during land-based training anywhere in Canada. Depleted uranium was eliminated from the Canadian Forces' weapons inventory in 1998. Canadian policy precludes the export of uranium and depleted uranium for military

use. Canada abstained on the First Committee resolution on this matter because, absent objective research findings that indicate adverse effects of the use of depleted uranium on human health, Canada does not view a moratorium on its use as necessary at this time.

Cuba

[Original: Spanish]
[20 June 2008]

1. Cuba believes that this resolution raises a topic that needs to be discussed within the United Nations framework, in particular the General Assembly as its most participatory and democratic organ. The last word has not yet been said on the effects of the use of weapons and ammunition containing depleted uranium, and their impact on living creatures and the environment could be significant.

Some general comments on depleted uranium (DU):

2. Uranium is a chemical and radioactive element basically composed of the isotopes U-238 (98 per cent) and U-235 (0.7 per cent) and other minor isotopes. Of the two isotopes, U-235 is the most important. It is highly radioactive and is used as nuclear fuel in reactors of this type, and as an essential component of nuclear bombs.

3. In order to obtain the desired U-235, the process begins in the deposits of complete uranium (a mixture of all its isotopes) where the element is found mixed with a huge volume of minerals and rocks, from which it must be separated. Mechanical and chemical methods are used for that purpose to produce a mass of uranium which is still not usable, because the U-235 must be separated. This process is known as "enrichment" and is conducted through isotopic diffusion, after which the uranium, converted into uranium hexaflouride, is forced through a porous membrane through which U-235 molecules, but not U-238, can pass easily.

4. By repeating this process hundreds of times, the treated complete uranium separates into two parts: one in which the percentage of U-235 continues to increase in relation to the total mass, and which will be used as nuclear fuel when it reaches the 1.5 to 3.5 per cent range; and the other part, in which the U-235 continues to decline in relation to the total, which is known as depleted uranium.

5. The enrichment process produces an extraordinary volume of depleted uranium with a very low percentage of U-235 compared to U-238. Even so, when the ratios (between the two isotopes) are compared with that found in nature, where uranium is mixed with tens of hundreds of tons of extraneous material, it can be concluded that depleted uranium is very dangerous.

6. Radioactivity is the capacity of the radioactive isotopes to emit particles and rays spontaneously and uncontrollably. These particles and rays, on impact with living organisms, cause the degeneration of tissues and can lead to cancer, leukaemia and other types of effects, including genetic mutations causing children to be born with widely varying deformities.

7. The ability of radioactive substances to cause the effects described basically depends on various factors, including the following major ones: intensity of the

exposure (characteristics of the isotope in question); time of exposure (duration for which the organism is exposed) and form of exposure. Regarding the latter factor, it must be clarified that the form of exposure may be external, that is to say when the radioactive substance falls on the skin and from that moment exercises its damaging effects; or internal, when the substance is absorbed through the air being breathed or ingested with water or food, and begins to affect the organism from within.

8. It is understandable that internal exposure is hundreds of times more dangerous than external exposure, given that all rays and particles emitted by the radioactive substance affect the organism. External exposure has an effect only through rays and particles emitted in the direction of the organism.

9. Uranium, as a heavy metal, is highly toxic, and its half-life is 4.5 million years. In other words, a gram of U-235, after 4.5 million years, will be reduced to 0.5 grams; after another 4.5 million years to 0.25 grams, and so forth. One gram of radioactive uranium can cause damage for millions of years.

Depleted uranium and its use in weapons and ammunition:

10. There are several reasons for the appeal of the use of depleted uranium in weapons:

(a) As a by-product of the enrichment process mentioned before, significant quantities of depleted uranium are stockpiled. Because of its dangerous radioactivity it cannot be disposed of easily, but is stored in secure locations for an extended period of time, which can be millions of years;

(b) Depleted uranium is a dense and heavy element, capable of resisting the impact of projectiles and other materials; it is therefore used in armour plating. However, it is also capable of piercing thick armour plating and therefore is used to make projectiles whose range can be greater than conventional projectiles;

(c) Depleted uranium is an element with pyrophoric qualities, meaning that it can catch fire when exposed to temperatures over 600 degrees. This temperature can easily be reached, not only when utilizing the projectile because of the explosive charge it contains, but also through the friction the projectile undergoes with the depleted uranium when piercing armour.

11. When a projectile containing depleted uranium impacts a target, it penetrates through it, catching fire, which causes the formation of two types of particles: uranium dioxide, which is soluble in blood, and other tiny, insoluble solids that acquire the characteristics of a ceramic because of the temperatures to which they were exposed.

12. These particles spread and contaminate the air, water and food exposed to them, and through which they can be absorbed by humans and other animals.

13. The soluble particles can be eliminated relatively easily in the days, weeks and months after they enter an organism, through perspiration, urine or the blood itself. The insoluble particles remain in the organism much longer. Those under 5 microns in size which are breathed in to the lungs remain there and affect the organism for life.

14. As for the solid particles which may be ingested with water and food, some will be expelled within weeks, months or years, and others will become part of the

tissue — mainly the bones, liver and kidneys — on which they will have a lifelong effect. In addition, after the death of a contaminated person and the decomposition of the body, they will remain active, causing damage for thousands of millions of years longer. It has been calculated that 97 per cent of the depleted uranium that enters an organism remains in it until death.

15. It is well known that weapons and ammunition containing depleted uranium were used in the final years of the twentieth century, and they are suspected to have been used in this century as well. Some non-governmental organizations have reported that, during the wars in the Persian Gulf which took place at the end of the last century, thousands of soldiers were exposed to the damaging effects of depleted uranium, and since that time the effects have shown up as part of the so-called "Gulf War syndrome". The effects include chronic pain, fatigue, hair loss, memory loss, deterioration of the immune system, liver and kidney disease and diseases of other organs.

16. Some publications believe that as a result of the use of projectiles containing depleted uranium, a high quantity of particles may be dispersed over the ground, and that the majority of their effects cannot be seen in the short term.

17. To date the reports on the subject issued by international agencies cannot be termed definitive, since some remain incomplete until research and verification is conducted in the locations where weapons and ammunition containing depleted uranium were known to be used and also on the persons exposed to their impact.

18. IAEA, WHO and UNEP have produced reports giving an initial assessment of the problem. Some of these documents refer to research conducted years after the time when depleted uranium was used; nevertheless, contamination caused by that substance was discovered.

19. According to WHO studies, the most likely way civilians could have come into contact with depleted uranium is through collecting objects (bullets or spent cartridges) from the surface of the earth. Consequently, routine methods for collection of such objects from the earth's surface would be beneficial. However, it is not known whether such clearance has been conducted, and whether subsequent scientific investigations can confirm the lack of danger.

20. Likewise, the probability of depleted uranium contamination of agricultural products is unknown, and the full range of effects it could cause in groundwater remains inconclusive.

21. The research carried out advises that consideration should be given to the effects that a projectile containing depleted uranium could have if it fell to the bottom of a family's well or in a town's water collection tank. It has not been possible to check the information in this study, or at least there are no reports that anything similar has been proven. According to WHO, neither is there data in the literature on the effects of depleted uranium in still or slow-moving water.

22. Furthermore, some of the studies conducted have demonstrated that, in the case of concentrated points of contamination, someone who might come into physical contact with the soil and thereby contaminate his hands or be affected by ingesting something contaminated with depleted uranium can suffer significant contamination from the point of view of the toxicity of heavy metals. Therefore, it

would also involve ingestion of depleted uranium above the level of health standards, leading to poor kidney function or kidney failure.

23. It is difficult to predict the effect that weapons and ammunition containing depleted uranium will have when they impact a particular area and affect drinking water supply. The resulting contamination can exceed norms for such cases, including WHO standards. Local conditions, the physical and chemical properties of the weapons and ammunition containing depleted uranium and soil and groundwater conditions, among other factors, are elements that can make it difficult to determine the effects.

24. Specifically, it is probable that some munitions or other weapons containing depleted uranium are buried in the earth at a depth of several metres, and together with those which could still be on the surface, they constitute a risk of contamination of groundwater and drinking water. A high level of discharge of weapons containing depleted uranium taking place in an area can increase the potential sources of water contamination from 10 to 100 times. The radiation dose is probably very low, but the resulting concentration of depleted uranium could exceed the WHO health standards for drinking water.

25. There are also indications that some plant material, such as lichen and possibly bark, can be good environmental indicators of depleted uranium. Preliminary results must be verified by additional analysis.

26. As far as we know, international agencies in the Balkans investigated a minimal percentage of all the sites attacked with ammunition containing depleted uranium during the armed conflict in that region. On the basis of such findings it is possible to extrapolate to other sites affected by this substance. However, further investigations will be necessary to confirm the validity of those extrapolations.

27. The Member States of the United Nations are unaware of the evolution of the problems encountered by the investigations conducted by international agencies in the late 1990s of the twentieth century and the beginnings of the twenty-first. The extent of the use of depleted uranium in weapons manufacture is also not known, nor whether and where weapons and ammunition containing depleted uranium were used after the conflicts that were investigated by the IAEA, WHO, UNEP and other agencies.

28. How to address the potential damage from the use of weapons and ammunition containing depleted uranium on human beings and other living creatures and the environment must be discussed.

29. Cuba reiterates the importance of resolution 62/30, which addresses a subject of immediate concern to humanity, and hopes that the Governments of United Nations Member States and the relevant international organizations can inform the Secretary-General of their views on the effects of the utilization of weapons and ammunition containing depleted uranium, in fulfilment of the request contained in this resolution.

Finland

[Original: English]
[7 July 2008]

1. Finland shares the concerns raised in the General Assembly about the potential risk related to the use of depleted uranium in armaments and ammunitions. The issue has been the object of several international studies and it merits further political discussions worldwide.

2. Finland does not possess any ammunition containing depleted uranium.

3. The exposure of Finnish peacekeepers to depleted uranium has been scientifically examined. Analyses were made of samples taken from troops serving in Kosovo in 2000 and 2001. No indication of abnormal exposure was found. The findings were published in 2001 (see K. Lehtomäki, J. Rantanen, A. Kallio and R. Pääkkönen, "Depleted uranium: assessment of exposure of Finnish KFOR peacekeepers", *Annales Medecinae Militares Fenniae*, vol. 76, No. 2 (2001), pp. 187-192). Finland continues to closely observe any international developments in the use of depleted uranium and is ready to undertake further studies if necessary.

4. Awareness of issues related to depleted uranium is included in the training of all Finnish peacekeepers. Relevant training is planned on the basis of the risk analysis of a mission. For instance, awareness-raising and training was given to troops in preparation for the mission in Lebanon.

5. An active dialogue between civic society, non-governmental organizations, the scientific community and civil military authorities continues nationally. Finland greatly values international efforts to discuss the potential risks of the use of depleted uranium in armaments and ammunitions.

Germany

[Original: English]
[16 May 2008]

1. In the light of the public debate on the question of whether the utilization of munitions containing depleted uranium could pose risks to humans and the environment, Germany supported resolution 62/30 on the understanding that further information on and research into the effects of depleted uranium on human health and the environment might be of help to find a suitable answer on this issue.

2. With regard to the use of armaments and ammunition containing depleted uranium by armed forces, the Federal Republic of Germany wishes to inform the Secretary-General that the German Federal Armed Forces are not stockpiling and have never used armaments or deployed ammunitions containing depleted uranium.

3. In view of German participation in joint international military operations, Germany in recent years has initiated two scientific studies with a view to assessing the potential negative effects of armaments and ammunitions containing depleted uranium on human health and the environment.

4. A first study, entitled "Measurements of daily urinary uranium excretion in German peacekeeping personnel and residents of the Kosovo region to assess

potential intakes of depleted uranium", summarizes research carried out by a renowned group of experts from the National Research Centre for Environment and Health, Middlesex University, the University of Bristol, Royal Holloway University of London and the University of Milan.

5. The aim of the study was to identify potential health risks originating from depleted uranium to peacekeeping personnel in the Balkans and extended to residents of Kosovo and southern Serbia, who lived in areas where ammunitions containing depleted uranium were deployed. Analysing more than 1,300 urine samples from peacekeeping personnel serving in the Balkans, residents of Kosovo and adjacent regions of Serbia and people living in Germany (unexposed control subjects) during the period from 1999 to 2006, as well as measuring ground and tap water samples from regions where depleted uranium munitions were deployed, the study concluded that peacekeeping personnel and residents serving or living in the Balkans were not exposed to significant amounts of depleted uranium and thus no health effects related to the toxicity of incorporated uranium are expected.

6. A second experimental study, published in 2007 and entitled "Long-term corrosion and leaching of depleted uranium in soil", was conducted by researchers from the National Research Centre for Environment and Health and the Rossendorf Research Centre. The study aimed to investigate long-term corrosion and leaching of depleted uranium from ammunition buried in columns with soil cores over a period of three years.

7. The study found that the annual corrosion rate of depleted uranium munitions increased significantly during the last two years as compared to the first year and that leaching rates increased in the second and third years. It concluded that, since the large temporal and inter-column variability of leaching that had already been observed after one year was not reduced after three years, neither leaching rates measured after one year nor leaching rates obtained after three years could reasonably be used to predict leaching rates in the long term. Given the fact that a prediction of the further development of leaching is almost impossible on the basis of obtained data in the study and that the geochemical behaviour of uranium depends on a variety of factors, the study emphasizes the necessity of additional research into the transport of uranium through soil and the potential contamination of groundwater in areas affected by depleted uranium weapons if deemed necessary.

8. The result of these studies, conducted to determine the potential harmful effects of ammunitions and armaments containing depleted uranium on human health and the environment, was that significant effects could not be detected.

Japan

[Original: English]
[6 June 2008]

1. In accordance with paragraph 1 of resolution 62/30, Japan submits its views to the Secretary-General on the effects of the use of armaments and ammunitions containing depleted uranium.

2. Japan has neither owned nor used armaments or ammunitions containing depleted uranium. Japan recognizes that despite the studies conducted by relevant international organizations on the effects of the use of armaments and ammunitions

containing depleted uranium on human health and the environment, at present no internationally definitive conclusion has been drawn. Japan will continue to follow carefully the developments of the studies conducted by the relevant international organizations.

3. Japan appreciates all studies and activities conducted by international organizations, including WHO, IAEA and UNEP, related to ammunitions containing depleted uranium. Japan would like to call upon all relevant international organizations to conduct successive on-site studies and further information gathering, and to provide their views on the effects that the use of depleted uranium munitions may have on the human body and the environment.

4. In this connection, Japan pays special attention to the opinions and activities of the interested non-governmental organizations in this field. Japan intends to engage in dialogue, where appropriate, with civil society on this matter.

Mali

[Original: French]
[9 May 2008]

The Republic of Mali does not possess any arms or ammunitions containing depleted uranium.

Netherlands

[Original: English]
[10 June 2008]

1. The Netherlands voted against General Assembly resolution 62/30. The following is a response to paragraph 1 of the resolution, in which the Assembly requested the Secretary-General to seek the views of Member States and relevant international organizations on the effects of the use of armaments and ammunitions containing depleted uranium.

2. The Netherlands recognizes the need for additional research on the effects of the use of armaments and ammunitions containing depleted uranium and appreciates that this issue is being discussed in the forum of the United Nations. However, the resolution's reference to the "potential" harmful effects of the use of depleted uranium munitions on human health and the environment cannot so far be substantiated by scientific studies conducted by relevant international organizations such as WHO.

3. The Dutch armed forces do not use munitions containing depleted uranium. In the context of multinational missions, however, it is not impossible that Dutch service personnel may operate in areas in which munitions containing depleted uranium are being or have been used by allies. The health and well-being of Dutch soldiers deployed on international missions is under the continuous scrutiny of the Dutch Government. Exposure to hazardous materials must be avoided to the greatest possible extent.

Qatar

[Original: Arabic]
[8 April 2008]

1. Depleted uranium is a by-product of the uranium enrichment process, which separates natural uranium into two components. The smaller of the two contains a proportion of the fissile isotope U-235 greater than the natural proportion of 0.72 per cent. The other, larger component contains a smaller than natural proportion of U-235. This is depleted uranium. The usual isotopic makeup of depleted uranium is as follows: 99.8 per cent U-238, 0.2 per cent U-235 and 0.001 per cent U-234.

2. U-238 has a radioactive half-life of 4.5 billion years. It has metal-like qualities of high density (about twice that of lead) and high rigidity, which make it desirable for use in armour-piercing shells. It was used in the wars in the Balkans (Kosovo) and the Gulf War.

3. The health effects of depleted uranium are that it is poisonous, causing lung cancer, ovarian cancer and kidney damage. In the wake of the Gulf War the United States left behind 600,000 pounds of uranium in Iraq and Kuwait. We knew that the effects of ammunitions containing depleted uranium can reach up to 48 kilometres from a blast, and we now know the full extent of the contamination that can result. Reports indicate a 300-fold rise above normal of radiation levels in Iraq, and a 16-fold rise in cases of ovarian cancer. In other words, the biggest effects are on civilians and on the environment in the long term.

4. Therefore, the State of Qatar is in favour of banning the use of armaments and ammunitions containing uranium.

Serbia

[Original: English]
[9 June 2008]

1. The ammunitions containing depleted uranium, manufactured in various calibres and for various types of weapons and first used in the Gulf War of 1991, were also used in the NATO raids on the Federal Republic of Yugoslavia in 1999 against targets in Kosovo and Metchija, Montenegro and southern Serbia. The 30mm-calibre PGU-148 API type containing 298 grams of depleted uranium was fired from a 7-barrel gun carried on A-10 *Thunderbolt II* aircraft.

2. The major focus of the bombing campaign in which this type of weapon was used was in the areas of Prizren, Uroševac, Djakovica, Dečane and Djurakovac (Kosovo and Metohija), the municipalities of Vranje, Bujanovac and Preševo (southern Serbia) and the Luštica peninsula (Montenegro). There is a discrepancy in the number of targets quoted in the report submitted by NATO to the panel of experts on depleted uranium in Geneva in 2000 at the request of UNEP and the data available to the Serbian military: according to the latter, 85 locations were targeted in Kosovo in Metohija, 4 in southern Serbia and 1 in Montenegro.

3. The bursting of the bullet fitted with depleted uranium and the burning of a part of it upon impact on a hard surface leads to the creation of particles and

aerosols. If the impact is made at the right angle, the ensuant temperature rises to over 1,000° C accounting for the burning/oxidation of a part of uranium; at an impact on a soft surface (land) only a small fraction of the bullet is transformed into aerosols the large particles of which are deposited at the place of the impact (within the range of 100m), whereas the remainder of the bullet penetrates the surface about 1m deep. Depending on weather conditions, the small particles may be spread dozens of kilometres away, leading to radioactive contamination of large expanses of soil and atmosphere.

4. The particles are entered into the human body either by inhalation or through the consumption of food and water and are deposited in the lungs, kidneys, bones and the brains for years. Uranium is not easily solved in water and bodily fluids, but its oxides are and may over time contaminate underground waters and, through plants used as fodder and human food, animals and people.

5. In a report of the United Kingdom Atomic Energy Authority it is said, among other things, that depleted uranium will be spread over the battlefield and round hit vehicles in various quantities and particle sizes, from dust to full-size penetrators. People would be ill-advised to stay close to large quantities of depleted uranium for a protracted period of time. Obviously, it would be important to warn the population not to collect the metal and keep it at home. The report goes on to say that vehicle and soil contamination in some of the affected areas may exceed expected limits and thus present an additional risk to decontamination teams and the population.

6. Depleted uranium ammunition affects the population even after the cessation of military operations as contamination cannot be controlled and localized. It threatens the environment and may spread to adjacent countries and regions. In a report of the Vinča Institute for Nuclear Science, Belgrade, it is said that "(c)onsidering the speed and the number of rounds fired, as well as the probability of self-inflammation and the amount of radiation exceeding that of natural uranium contained in the soil many hundred-fold, it can be concluded that the use of depleted uranium ammunition leads to contamination of the environment with long-term consequences".

7. The strength of the gamma-ray dose at the contact with the bullet of the depleted uranium ammunition used in the raid against the Federal Republic of Yugoslavia in 1999 has been measured at 0.1 milliGray/hour; under the International Basic Safety Standards for Protection against Ionizing Radiation published by IAEA in 1996, the tested material belongs among radioactive material and its handling is subject to strict protection measures.

8. As radioactive waste, depleted uranium ammunition must be stored in appropriate facilities. Decontamination of contaminated locations is carried out either through excavation and removal of the soil, physical separation, a chemical separation process or at-location stabilization. There does not appear to be much experience in the world in this field today. Most often, except for at-location chemical stabilization, recourse is had to excavation whereby the entire contaminated soil is excavated and stored in appropriate facilities or only a part of it is dug up and replaced by pure earth.

9. The decontamination of locations contaminated with depleted uranium ammunition in southern Serbia has been carried out by way of physical separation.

10. The Republic of Serbia considers that the use of depleted uranium ammunition is a violation of the basic principles of international humanitarian law because:

(a) Depleted uranium is toxic and radioactive and, if taken into the human body, its particles have a long-time negative effect on human health; indeed, they may affect man throughout his life. The negative effect is noticeable in descendents, too. The use of the ammunition causes unnecessary human suffering and excessive harm disproportionate to military objectives;

(b) Spread of depleted uranium particles cannot be controlled or prevented, which affects civilian population. Depleted uranium ammunition, therefore, belongs among weapons of unselective mass destruction;

(c) Depleted uranium particles contaminate soil for thousands of years;

(d) Chemical activities of uranium oxides are a threat to the environment.

11. Accordingly:

(a) Depleted uranium ammunition is a very dangerous radioactive material with primary and secondary effects and poses a threat not only to military personnel in combat operations, but also to civilian population, flora and fauna and the environment;

(b) Use of depleted uranium ammunition accounts for permanent contamination of living creatures, material resources, edifices and the environment;

(c) Use of depleted uranium ammunition is inhuman; its military effects are disproportionate to its affliction of, and consequences for, the living world and the environment;

(d) The contaminated soil must not be left unattended and must be decontaminated, notwithstanding spiralling costs and inherent risks. Full decontamination, however, is hardly possible;

(e) Serbia has acquired considerable experience and trained personnel in carrying out the process of decontamination. The personnel may be contracted for similar assignments elsewhere;

(f) Information on the effects of depleted uranium ammunition, as well as relevant resources and expert assistance, should be made available to the affected countries;

(g) Initiative should be launched to adopt a Convention against the production and use of depleted uranium ammunition and on its destruction.

Spain

[Original: Spanish]
[29 April 2008]

Characteristics and applications of depleted uranium

1. Depleted uranium is a weakly radioactive heavy metal that is stronger than other metals, such as tungsten, and is used in ammunition.

2. In the armaments sector, depleted uranium is used to make defensive armour plate and armour-piercing ammunition, especially the coating of tank-piercing projectiles, as it is highly effective in penetrating steel.

Associated potential risks and precautionary measures

3. The handling of projectiles or ammunition containing depleted uranium does not require any special precautions besides those required for the handling of any type of conventional ammunition. The same is generally true of the dust or debris remaining after detonation.

4. Modern anti-tank projectiles combine the piercing and thermal qualities of depleted uranium, part of which, upon impact, produces an aerosol of fine particles. These particles may be inhaled, although casualties in this case are mainly due to the shock wave or heat generated upon impact, rather than particle inhalation, which would be more likely to cause harm in the long term.

5. Nonetheless, in an enclosed space, such as the interior of a combat vehicle, a cloud of slowly dispersing alpha particles could form in the absence of ventilation. Only specially trained personnel should handle debris in this case, since in addition to the potential toxicity of depleted uranium, there are also the standard hazards associated with this type of debris: the presence of explosive remnants of war, unexploded munitions, flammable or corrosive liquids, etc. It is advisable to educate troops and civilians in this regard and to clear the conflict area of any debris where security conditions allow.

Spanish study on the potential health risks associated with depleted uranium

6. In forming its opinion on this issue, the Spanish Government has drawn on the experience it accumulated in response to the expressions of national and international public concern, beginning in December 2000, over reports that military personnel of NATO who had served in the Balkans as part of various national contingents had abnormally high rates of cancer. This, in turn, was attributed to their having allegedly handled ammunition containing depleted uranium or the debris of such ammunition following detonation.

7. In light of the possibility that Spanish soldiers having participated in peacekeeping missions in the Balkans in the 1990s or currently on mission had contracted such diseases, a Scientific Committee was established to provide health-related advice to the Minister of Defence. The Committee's preliminary report, issued in March 2001, contained seven proposals for further development, including:

(a) Monitoring of the health status of military personnel having been deployed in the Balkans;

(b) Follow-up of the pre- and post-deployment medical examination protocols;

(c) Coordination with the system of periodic medical examinations regulated by the Ministry of Defence;

(d) Establishment and maintenance of a database on mission personnel (cohort);

(e) Monitoring of the cohort's health over an initially indeterminate period of time;

(f) Assignment of such monitoring tasks to a specialized body of the Military Health Department — the Institute of Preventive Medicine — and maintenance of the Scientific Committee for reference and guidance purposes;

(g) Preservation of biological samples for possible future analysis.

8. In April 2001, the plenary of Spain's Congress of Deputies agreed to carry out the seven proposals for follow-up of the situation presented by the Scientific Committee experts. It also proposed sending a report to the Defence Commission on the steps taken and results obtained following implementation of the proposals.

9. In February 2003, the first annual report was issued, including the findings of all the studies conducted thus far. The report's conclusions bore out all those of the preliminary report, to the effect that the situation presented no abnormalities. In comparison to the general Spanish population, the distribution of cancers in the sample studied was lower than expected, and no significant anomalies were identified in the study on exposure to the heavy metals analysed. The report highlighted the fact that the health surveillance systems for personnel deployed abroad, which had been strengthened in response to the concerns raised, had not detected any particular change in the area of operations that might have had an impact on the health of such personnel.

10. As a result, the Scientific Committee suggested suspending its activities while maintaining health surveillance activities through the Military Health Department.

11. The epidemiological study included 28,665 soldiers who had participated in peacekeeping operations in the Balkans between 1 January 1993 and 1 July 2001, whose health was monitored until 30 November 2002. The amount of time spent on mission ranged from 3 to 15 months, with an average of 6.5 months.

12. The monitoring was based on methods of identifying and reporting cases, using various research methods. Beginning in 2002, it was strengthened through the use of individual surveys in order to try to identify all possible cases.

13. The 40 malignancies identified within the cohort, including their distribution, histological and biological characteristics, and clinical behaviour, did not differ from those observed in standard clinical practice for the Spanish population of the same sex and age group. The results of the tests measuring heavy metal levels, including more than 31,000 tests for uranium, were within normal limits.

Spain's views on the effects of the use of armaments and ammunitions containing depleted uranium

14. Spain does not have, nor has it ever had, ammunition containing depleted uranium. The use of this material is not proscribed by any international instrument.

15. Spanish studies have not been able to demonstrate a cause-and-effect relationship between the weak radiation detected in the debris of targets attacked with depleted uranium projectiles and the development of cancer or other diseases in soldiers or civilians.

16. In addition, the numerous studies on the use of armaments containing depleted uranium in various situations, carried out by UNEP, WHO, the European

Commission and NATO, indicate that the use of depleted uranium does not pose a significant radiological risk.

17. In particular, on 6 March 2001, the European Commission's Environment Directorate-General published a report by a group of independent scientific experts commissioned to study the effects of depleted uranium. The group, made up of 35 physicians, chemists and nuclear scientists from member States, concluded that, on the basis of available information, exposure to depleted uranium could not produce detectable health effects.

18. Also in 2001, NATO established an ad hoc committee to study the effects on troops and the civilian population of the depleted uranium used in Alliance operations in the Balkans (depleted uranium was used in the 1991 Gulf War and in the 1999 Kosovo operations). The results of this study, to which institutions such as the International Committee of the Red Cross contributed, indicated that:

(a) There was no evidence of an increase in incidence of illness among peacekeepers in the Balkans compared with the incidence of illness among armed forces not serving in the Balkans;

(b) There was no evidence of a link between depleted uranium and health problems such as leukaemia or other cancers.

19. In conclusion:

(a) Depleted uranium presents little radiological risk, since its level of radioactivity is lower than the level of natural radioactivity. Depleted uranium is only a radiological hazard when, in its pure form, it remains in contact with the skin for an extended period of time;

(b) According to current research, the only possible health risk is the use of a heavy metal such as lead or depleted uranium, which, in certain circumstances, can have harmful effects on the liver and kidneys. An individual must be nearby at the time of impact and must absorb a large quantity of depleted uranium dust in order to be negatively affected by such risks.

III. Replies received from agencies and organs of the United Nations system

International Atomic Energy Agency

[Original: English]
[3 June 2008]

The IAEA assessment of radiological consequences of depleted uranium residues contamination in post-conflict situations

1. In the recent past, the use of depleted uranium in conventional anti-tank munitions during conflicts in the Balkans and the Middle East resulted in the contamination of these territories with radioactive residues.

2. Depleted uranium is one of the by-products of uranium enrichment and, like any other uranium compound, has both chemical and radiological toxicity. Depleted uranium is only slightly radioactive, 60 per cent as radioactive as natural uranium.

Depleted uranium has the same chemical and physical properties as natural uranium. The chemical toxicity of uranium is normally the dominant factor for human health. However, in special circumstances in which depleted uranium was inhaled or ingested or where fragments came into close contact with individuals, it is necessary to also assess its radiological impact.

3. After the above-mentioned conflicts, questions arose regarding the possible consequences of the existence of depleted uranium residues for local populations and the environment. As part of the United Nations system's effort to respond to the requests of affected States to assess the consequences of the use of depleted uranium ammunitions in conflict situations, IAEA — with its unique statutory functions, i.e., to establish standards of safety for protection against radiation exposure and to provide for the application of these standards — has been involved in coordinated evaluation exercises.

4. A number of evaluation of the environmental and health impact of depleted uranium munitions have been performed by national and international organizations. IAEA participated together with UNEP and WHO in several international appraisals like those in Bosnia and Herzegovina, Serbia and Montenegro, Kosovo, Kuwait, Iraq and Lebanon. The radiological framework for these studies was the International Basic Safety Standards for Protection against Ionizing Radiation and for the Safety of Radiation Sources (Safety Series No. 115, IAEA, Vienna, 1996) and the methodology was generally based on sampling campaigns, analysis of the environmental samples in recognized international laboratories and radiological assessments performed by international experts.

5. The objectives of these assessments have been to draw conclusions regarding the toxic and radiological safety and to make recommendations to mitigate the hazards to the population and the environment, on the basis of comprehensive surveys at specific locations where depleted uranium ammunition residues may have been spread. These studies exclusively dealt with civilian inhabitants and environment radiological risk in areas affected by military actions after the conflicts were terminated. The results and conclusions are valid at the time of the assessments and, when possible and under certain grounds, prospectively, IAEA did not evaluate the impact of depleted uranium ammunition on the troops or the populations at the time of the conflicts.

6. In general, the results of these assessments indicated that the existence of depleted uranium residues dispersed in the environment does not pose a radiological hazard to the population of the affected regions. Estimated annual radiation doses that could arise from exposure to depleted uranium residues would be very low and of little radiological concern. Annual radiation doses in the areas where residues do exist would be of the order of a few microsieverts, well below the annual doses received by the population from the natural sources of radiation in the environment and far below the reference level recommended by IAEA as a radiological criterion to help establish whether remedial actions are necessary.

7. Complete depleted uranium ammunition or fragments can still be found at some locations where depleted uranium weapons were used during past wars. Prolonged skin contact with these depleted uranium residues is the only possible exposure pathway that could result in exposures of radiological significance. As long as access to the areas where these fragments exist remains restricted, the likelihood that members of the public could come into contact with these residues is

low. The recommendations to the national authorities, in all the cases studied were to collect any depleted uranium ammunition or fragments and any war equipment which have been in direct contact with these ammunitions and isolate them from the public in appropriate locations until it can be processed as low level radioactive waste and eventually safely disposed of. Some environmental remedial actions like covering of areas with uncontaminated soils could be convenient at some particular locations, depending on the use of the land.

8. After the conclusion of the investigations in which IAEA participated, the national authorities in the affected regions should have had the competence and equipment to carry out the necessary monitoring, survey and remedial activities in relation to depleted uranium. This was actually observed in all the cases studied.

9. IAEA together with UNEP and WHO provided coordinated response to the request of its Member States to assess the post-conflict radiological risk to the public and the environment from the contamination of territories with depleted uranium residues. IAEA generally concluded that the radiological risk was not significant and could be controlled with simple countermeasures conducted by national authorities. It was also observed that in a post-conflict environment where the social and economic disruption is high, the radiation fear linked to the presence of depleted uranium residues further increases the anxiety of the population. In many of the concerned countries the results of the radiological evaluations provided a basis for public reassurance due to the low significance of the radiological impact.

World Health Organization

[Original: English]
[2 June 2008]

Background

1. The main civilian uses of depleted uranium include counterweights in aircraft, radiation shields in medical radiation therapy machines and containers for the transport of radioactive materials. The military uses of depleted uranium for defensive armour plate is based on its high density as well as ability to ignite on impact if the temperature exceeds 600° C.

2. Earlier reports of the international organization (IAEA, UNEP and WHO) focused on environmental and health impact of depleted uranium for example in Bosnia and Kuwait. Depleted uranium concentration levels in soil exceeding background levels of uranium was reported close to locations of depleted uranium shrapnel or remains of tanks left after military operations. Over time, the depleted uranium concentration is dispersed into the wider natural environment by wind and rain. People living or working in affected areas may inhale re-suspended contaminated dusts.

Potential health effects of exposure to depleted uranium

3. Average annual normal intake of uranium by an adult is estimated to be about 500 µg from ingestion of food and water and 0.6 µg from inhaling air. Ingestion of small amounts of depleted uranium-contaminated soil by small children may occur while playing in post-conflict zones. Occasional exposure of depleted uranium through the skin contact does not result in any ascertainable health effect.

4. Because depleted uranium is only weakly radioactive, chemical toxicity is the prevailing concern. The kidneys are the main site of potential damage from chemical toxicity of uranium. Limited information from human studies indicates that the severity of effects on kidney function and the time taken for kidney function to return to normal both increase with the level of uranium exposure.

5. To date, no consistent evidence of adverse effects of depleted uranium has been reported for the skeleton or liver. No reproductive or developmental effects have been reported in humans. Long-term follow-up studies on military personnel wounded during military operations and living with depleted uranium-containing fragments embedded in soft tissue show elevated level of depleted uranium in urine. Although uranium released from embedded fragments may accumulate in the central nervous system tissue, and some animal and human studies are suggestive of effects on central nervous system function, it is difficult to draw firm conclusions from the few studies reported.

6. In 2001, WHO produced the report "*Depleted uranium: sources, exposure and health effects*", which will be updated in 2008. New evidence from recent epidemiological and experimental studies will be reviewed, however, no major deviation from previous conclusions is expected.

Monitoring and treatment of exposed individuals

7. For the general population, neither civilian nor military use of depleted uranium is likely to produce radiation doses significantly above normal background levels. Therefore, individual exposure assessments for depleted uranium will normally not be required. Exposure assessments based on environmental measurements may be useful for monitoring and the information and reassurance of the public.

8. When an individual is suspected of having been exposed to depleted uranium at a level of dose significantly above the normal background level, an assessment of depleted uranium exposure and kidney function may be required. This is best achieved by analysis of daily urine excretion.

9. In conjunction with the United Nations Joint Medical Service, WHO has developed guidance on exposure to depleted uranium for medical officers and for programme administrators. These recommendations provide advice on the need for special medical examinations or monitoring the health of populations living in conflict areas with possibly significant exposure to depleted uranium (see www.who.int/ionizing_radiation/en/Recommend_Med_Officers_final.pdf).

Recommendations

10. Following military conflicts, levels of depleted uranium concentration in soil and air might be detected in affected areas even after a few years. The area contaminated with armour, tanks, shrapnel, etc. should be monitored. Where justified and possible, clean-up operations in impact zones should be undertaken if there are substantial numbers of radioactive projectiles remaining and where qualified experts deem contamination levels to be unacceptable. If high concentrations of depleted uranium dust or metal fragments are present, then areas may need to be cordoned off until removal can be accomplished. Such impact sites are likely to contain a variety of hazardous materials, in particular unexploded

ordnance. Due consideration needs to be given to all hazards, and the potential hazard from depleted uranium kept in perspective. In general, disposal of depleted uranium should follow appropriate national or international recommendations.

11. Particular emphasis should be placed on the protection of children. Small children could receive greater exposure to depleted uranium when playing in or near depleted uranium impact sites. Their typical hand-to-mouth activity could lead to high depleted uranium ingestion from contaminated soil.

12. Risk communication campaigns may be needed in the affected areas to educate local populations on potential hazards and risks for their health. This is especially important in areas where scrap metal is collected and melted for sale. This may impose a significant risk to health of people and especially children due to the inhalation of toxic vapours resulting from metal melting. National authorities for the affected post-conflict zones should be advised to take action to control and regulate such activities in local communities.

United Nations A/63/171

General Assembly

Distr.: General
24 July 2008
English
Original: English/Russian/Spanish

Sixty-third session
Item 91 (y) of the provisional agenda*
General and complete disarmament

Confidence-building measures in the regional and subregional context

Report of the Secretary-General

Contents

		Page
I.	Introduction	2
II.	Replies received from Member States	2
	Bosnia and Herzegovina	2
	Cuba	4
	Mexico	6
	Panama	8
	Qatar	8
	Republic of Korea	9
	Spain	11
	Ukraine	13

* A/63/150.

08-43899 (E) 120808 150808

I. Introduction

1. In its resolution 62/45, the General Assembly reaffirmed the ways and means regarding confidence- and security-building measures set out in the report of the Disarmament Commission on its 1993 session, and it called upon Member States to pursue these ways and means through sustained consultations and dialogue, while at the same time avoiding actions that may hinder or impair such a dialogue. Furthermore, the General Assembly urged States to comply strictly with all bilateral, regional and international agreements, including arms control and disarmament agreements, to which they are a party. The Assembly also emphasized that the objective of confidence-building measures should be to help strengthen international peace and security and be consistent with the principle of undiminished security at the lowest level of armaments, and encouraged the promotion of bilateral and regional confidence-building measures, with the consent and participation of the parties concerned, to avoid conflict and prevent the unintended and accidental outbreak of hostilities. It requested the Secretary-General to submit a report to the General Assembly at its sixty-third session containing the views of Member States on confidence-building measures in the regional and subregional context. The present report is submitted pursuant to that request.

2. A note verbale was sent on 19 February 2008 to all Member States requesting their views. To date, replies from the Governments of Bosnia and Herzegovina, Cuba, Mexico, Panama, Qatar, the Republic of Korea, Spain and Ukraine have been received and are reproduced in section II below. Additional replies received will be issued as addenda to the present report.

II. Replies received from Member States

Bosnia and Herzegovina

[Original: English]
[30 April 2008]

1. Bosnia and Herzegovina is a signatory of the Open Skies Agreement and a member State of the Organization for Security and Cooperation in Europe which participates in the implementation of the Vienna Document 1999 of the negotiations on building trust and security. Bosnia and Herzegovina is also the signatory of the Agreement on Sub-regional Arms Control, Article IV, Annex 1-B of the General Framework Agreement for Peace in Bosnia and Herzegovina.

- *By implementing the Open Skies Agreement, which establishes the open skies regime for reconnaissance flights above the territories of other countries, the Ministry of Defence of Bosnia and Herzegovina enables air reconnaissance of territories of all "signatory countries", and contributes to further development and strengthening of peace, stability and security cooperation in Europe, based on open and transparent principles.*

- *By implementing measures to build trust and security incorporated in the Vienna Document 1999, relating to exchange and verification of military information regarding: armed forces of participating countries, their military activities, defence policy including military budgets, locations, strength and*

quality of military formations and units, exchange of annual activity calendars and pre-announcement of military activities, their monitoring with the goal of strengthening trust and openness. Bosnia and Herzegovina is promoting deeper, broader and more comprehensive cooperation between participating countries.

2. Guided by the General Framework Agreement for Peace in Bosnia and Herzegovina, Annex 1-B, Agreement on Regional Stabilization, Article IV, signed in Paris on 14 December 1995, Bosnia and Herzegovina signed the Agreement on Sub-regional Arms Control on 14 June 1996. The Agreement was also signed by the Republic of Croatia, the Republic of Serbia and the Republic of Montenegro. In order to create sustainable peace in the territories of these countries, measures for regional stabilization and control of weapons were set forth and new forms of cooperation were established in the field of security, aimed at building transparency and trust, and achieving balanced and stable levels of defence with the least quantity of weapons, in line with security principles of signatory countries and the need to avoid competition in this field.

- *The Ministry of Defence of Bosnia and Herzegovina attaches great importance to strengthening trust between the SEE countries. We believe that bilateral measures undoubtedly contribute to increasing transparency, openness, trust and security through strengthening good-neighbourly relations and cooperation in the field of security and control of weapons. The implementation of the Sub-regional Cooperation Agreement is certainly a good example of a successful forum of cooperation as well as the start of implementation of Annex 1-B, Article V, of the Dayton Peace Agreement, on the basis of which two measures of verification have been undertaken in the form of mutual evaluation visits between Bosnia and Herzegovina and the Federal Republic of Germany. Those visits were carried out in keeping with provisions of the Vienna Document 1999, and the guest inspectors from the SEE countries were involved in inspection teams. In this way, the Ministry of Defence of Bosnia and Herzegovina is improving its position and significance in regional cooperation in the field of strengthening measures of trust and security.*

3. Confirming the value of the purposes and principles of the Charter of the United Nations and of other international laws, and acknowledging the need to improve cooperation in the field of security by further stimulating responsible and cooperative behaviour in the field of security, the Ministry of Defence of Bosnia and Herzegovina has been a sound participant in implementing the Chemical Weapons Convention, the Biological Weapons Convention, the Convention on Certain Conventional Weapons of the United Nations programme on small arms and light weapons in all its aspects, as well as the United Nations Register on conventional weapons and in many other major political and military documents and decisions of the OSCE.

- *Since all the above-said instruments constitute an integral and essential element of European security and the security cooperation and stability policy, we believe that security and stability cooperation policy will remain a strong mechanism for strengthening security as long as a security risk is there. The Ministry of Defence of Bosnia and Herzegovina is determined to develop other forms of cooperation in the field of defence, at different regional levels, and to share its rich experiences and acquired knowledge relating to the implementation of the agreement on the control of weapons with other interested countries.*

Cuba

[Original: Spanish]
[11 June 2008]

1. The Republic of Cuba considers that, in accordance with the directives approved by consensus in 1988 by the United Nations General Assembly, confidence-building "is a step-by-step process of taking all concrete and effective measures which express political commitments and are of military significance and which are designed to make progress in strengthening confidence and security to lessen tension and assist in arms limitation and disarmament".[1]

2. Confidence-building measures are based on the following principles:

(a) Refraining from the threat or use of force against the territorial integrity or political independence of any State, or in any other manner inconsistent with the purposes of the United Nations Charter;

(b) Peaceful settlement of disputes;

(c) Non-intervention in internal affairs;

(d) Cooperation among States in solving international (and regional) problems and in promoting human rights;

(e) Sovereign equality and respect for the rights inherent in sovereignty;

(f) Equal rights and self-determination of peoples;

(g) Fulfilment in good faith of obligations under international law;

(h) As countries need to monitor their borders, an appropriate system of communication between States is needed in order to avoid possible sources of conflict, taking into account the proximity of States and the confluence of ships, aircraft and units in general in adjacent areas.

3. Nevertheless, for the establishment of confidence-building measures in the military sphere, tensions in the region or subregion have to be reduced and cooperation must be enhanced so that any situation, however complicated it is, can be resolved through dialogue and negotiation. When there are certain minimum conditions for reducing tension, some measures such as the following can be implemented:

(a) Provide advance notice of all exercises and manoeuvres that take place in the region, especially those involving the movement of forces and equipment by sea and by air in areas close to other countries;

(b) Adopt measures for the gradual reduction of forces and equipment involved in such exercises; reduce live-fire activities with long-range weapons systems that could hit unintended targets at sea, on land or in the air;

(c) Provide notification of reservations of air and maritime space of the purposes of such exercises or other military activities. Such notification should take

[1] Comprehensive Study on Confidence-Building Measures, Disarmament Study No. 7, United Nations, 1982.

place through the established channels and reach all interested parties sufficiently in advance;

(d) At the time of approval of exercises and manoeuvres of a certain scale, explain their objectives, the tactical and operational issues involved and the numbers of forces participating;

(e) When possible, invite military representatives from the countries of the region to participate as observers in some events or movements of these exercises;

(f) Conduct the preparatory combat activities of the armed forces at a prudent distance from the coasts or borders of other countries, unless the latter are participating in those activities or give their prior consent to the party conducting them. Particularly important are aviation activities in areas close to other countries, which are a significant risk;

(g) Reach agreements to ban exercises and manoeuvres in areas where there are intensive commercial fishing, tourism, scientific research or other activities;

(h) Provide advance notice of the use of warships (especially aircraft carriers and amphibious units) in areas close to other countries, in groups or in isolation;

(i) An advance notification system for when units of this type cross passages or straits where there is intense traffic, including the Yucatan Canal, the Florida Straits and Windward Passage;

(j) Establish limits in specific areas for the presence of nuclear-powered ships, as well as more severe restrictions for ships and aircraft with the capacity to carry nuclear arms;

(k) Install "hot lines" between governments and military commanders of the countries in the region so that any urgent situation that arises can be resolved in a timely manner;

(l) Organize bilateral and multilateral contacts and events on a regular basis for specialized personnel in order to improve the relations between military forces in the area and to create a climate of mutual confidence in the military sphere;

(m) Particularly important would be issues relating to military bases of other countries in the region. Initial measures could be taken on the status of such facilities. Advocacy efforts could be made for the withdrawal of facilities that are present against the will of governments and peoples in the area; especially, among other factors, if they infringe the sovereignty and territorial integrity of the nation where they are situated.

4. Another step towards a system of confidence-building measures could be the qualitative and quantitative limitation of the armed forces of all countries in the hemisphere, while respecting the sovereign right of each nation to have armed forces capable of defending its sovereignty and territorial integrity and maintaining domestic order.

5. To the extent possible, and without any impact on the national security of the respective countries, measures should be taken to promote mutual understanding between the armed forces of the region to ensure greater transparency in all possible areas. States with more powerful armed forces should state their intention not to attack smaller countries.

6. The above will be possible to the extent that States have the necessary armed forces to guarantee their national sovereignty and consider that there is no danger of military attack, political pressure or economic coercion.

Mexico

[Original: Spanish]
[23 May 2008]

Report of the Government of Mexico on General Assembly resolution 62/45 entitled "Confidence-building measures in the regional and subregional context"

1. In response to note verbale ODA/12-2008/CBMRSC of 19 February 2008 from the Office for Disarmament Affairs, set out below is the report of the Government of Mexico on "Confidence-building measures in the regional and subregional context", in accordance with resolution 62/45, adopted on 5 December 2007 by the United Nations General Assembly.

2. Mexico supports and contributes to the implementation of confidence-building measures in the regional and subregional context by complying with the international treaties it has signed with respect to weapons of mass destruction and conventional arms.

3. In this connection, pursuant to the relevant General Assembly resolutions, Mexico has submitted reports on the measures taken at the national level in various areas: (a) objective information on military matters, including transparency of military expenditures; (b) the illicit trade in small arms and light weapons in all its aspects; (c) problems arising from the accumulation of conventional ammunition stockpiles in surplus; (d) confidence-building measures in the field of conventional arms; (e) conventional arms control at the regional and subregional levels; (f) implementation of the Convention on the Prohibition of the Use, Stockpiling, Production and Transfer of Anti-personnel Mines and on Their Destruction; (g) towards an arms trade treaty: establishing common international standards for the import, export and transfer of conventional arms; and (h) transparency in armaments.

4. As part of the confidence-building measures at the regional and subregional levels, Mexico does not carry out joint military exercises with other countries; however, when invitations are received to participate in such exercises, the military attachés accredited in the host country are designated as observers.

5. With the aim of addressing issues of security and mutual interest in order to promote unity, increase security in the hemisphere and strengthen inter-American friendship, Mexico has participated in a number of regional military forums, including the Conference of Ministers of Defense of the Americas. It has also attended the Conference of the Chiefs of the Air Forces of the Americas as an observer and the Conference of American Armies as an active participant. It has also participated in meetings of the Inter-American Defence Board.

6. At the same time, through the military attachés assigned to the Embassies of Mexico in various countries, the Ministry of Defence has attended conferences and seminars supported by military training centres and, in return, Mexico has invited various military officers to give lectures at military training institutions in order to exchange opinions and experiences on military topics related to hemispheric security.

7. In the bilateral arena, agreements have been signed with the United States Department of Defense for establishing army personnel exchange programmes to strengthen the links of friendship and understanding between the armed forces of the two countries.

8. Mexico also has binational commissions with the United States, Guatemala and Belize which have initiated specific coordination and cooperation activities between the governments with a view to promoting economic and social development as well as security in common border areas.

9. Moreover, in order to promote the publication of information on actions taken by the Ministry of Defence in carrying out its general tasks for the benefit of the people of Mexico, as well as to contribute to greater transparency on defence policy issues by providing information on the organization, structure, size and composition of the armed forces, the Ministry prepared a book on the Mexican army and armed forces which was distributed to the defence ministries of the countries and organizations in the hemisphere.

10. In the context of the Organization of American States (OAS), which is considered to have a role in hemispheric security, the issue became more important at the end of the Cold War, as part of the "new agenda" of that organization. In 1993, the twenty-second OAS General Assembly approved resolution 1247 entitled "Meeting of Experts on Confidence and Security-Building Measures in the Region", which promoted the strengthening of confidence and security between States. Since that time Mexico has taken part in various regional conferences on that topic.

11. In 2007, Mexico participated in the Third Forum on Confidence- and Security-Building Measures which was convened by OAS General Assembly resolution 2270 of 2007 entitled "Confidence and Security-Building in the Americas" and took place at OAS headquarters on 15 April 2008. At that Conference, the following document was circulated: "Summary Table of Member States' Reports on the Application of Confidence- and Security-Building Measures for the Period 1995-2007" (OEA/Ser.K/XXIX) in which it is stated that Mexico has submitted reports for the following years: 1996, 2000, 2002, 2003 and 2006. These reports may be consulted at the following web address: http://www.oas.org/CSH/spanish/mfc.asp.

12. Mexico considers that confidence among States is the basis for consolidating a system of hemispheric security. Mexico therefore recognizes and complies with regional, subregional and bilateral confidence-building measures, including the measures contained in the Declarations of Santiago and San Salvador, and urges other States to meet their commitments in that area, especially the commitment to provide information for the United Nations Register of Conventional Arms and the System for Standardized Reporting of Military Expenditures, as a means of promoting transparency in relations between States.

13. In the multilateral arena, Mexico supports and continues to promote, in the United Nations Disarmament Commission, the Conference on Disarmament, the First Committee of the General Assembly and other major disarmament forums, confidence-building measures in the regional and subregional context. It also supports the development of a regional approach by providing voluntary financial contributions for the United Nations Regional Centre for Peace, Disarmament and Development in Latin America and the Caribbean.

14. In the same vein, Mexico supports the adoption of resolutions by the First Committee of the United Nations General Assembly and the implementation of measures to strengthen international disarmament and non-proliferation efforts.

Panama

[Original: Spanish]
[29 May 2008]

1. We believe it is important that States comply with all bilateral, regional and international agreements to which they are a party, including arms control and disarmament agreements. We therefore recommend the adoption of a proposal to establish a reasonable military balance among States and participation in the System for the Standardized Reporting of Military Expenditure, as a confidence-building measure at the regional level.

2. Moreover, we consider the experience gained in connection with the implementation of the Framework Treaty on Democratic Security in Central America as a confidence-building measure at the subregional level which could serve as a model for other regions and subregions at the global level and that these measures will help to build confidence in the regional and subregional context.

Qatar

[Original: English]
[17 June 2008]

1. The State of Qatar supports the establishment of confidence-building measures at the regional and subregional levels, and participates in it by means of compliance with international conventions related to weapons of mass destruction and conventional weapons.

2. In this respect, and in compliance with United Nations General Assembly resolutions, the State of Qatar provides information on the measures it has taken at the national level concerning specific matters in the field of disarmament and confidence-building, including (a) the prevention of illegal trade in small arms and light weapons in all its aspects; (b) the implementation of the Convention on the Prohibition of the Use, Stockpiling, Production and Transfer of Anti-personnel Mines and on Their Destruction; and (c) other related matters.

3. The State of Qatar supports and continues to encourage measures that aim at confidence-building at the regional and subregional levels through the United Nations Disarmament Commission, the Conference on Disarmament, the First

Committee of the General Assembly (Disarmament and International Security) and other important disarmament forums.

4. In this respect, the State of Qatar encourages the adoption of resolutions in the First Committee and the implementation of measures that aim to reinforce international efforts for disarmament and non-proliferation.

5. The mandate of the Security Council is the maintenance of international peace and security, according to Article 24 (1) of the Charter of the United Nations. While the work of the Security Council is concerned with peacekeeping operations, which are in some cases established under Chapter VII of the Charter, resolutions adopted under Article 33 of the Charter are also important.

6. In fact, the Government of the State of Qatar is convinced that the resolution of conflicts between States as provided for in Article 33 should be encouraged in order to avoid resort to Chapter VII at later stages.

7. Moreover, the promotion of conflict resolution according to Article 33 of the Charter will help promote the implementation of the United Nations Declaration and Programme of Action on a Culture of Peace, included in General Assembly resolution 53/243, and can be considered to interpret Article 33, which considers the Security Council the principal organ responsible for conflict prevention and peaceful settlement.

Republic of Korea

[Original: English]
[22 July 2008]

1. The Republic of Korea is actively participating in the discussions on confidence-building measures in various bodies for regional and subregional cooperation encompassing the Korean Peninsula and regions such as North-East Asia, South-East Asia, the Asia-Pacific region and Central Asia. Through its earnest participation it seeks to alleviate tensions in North-East Asia stemming from the particular security situation on the Korean Peninsula and the various historical and geopolitical complexities in the North-East Asian region. Furthermore, through its active participation in the discussions on confidence-building measures, the Republic of Korea seeks also to prevent armed conflicts and to contribute to the promotion of peace and stability in Asia as a whole.

2. To achieve the long-term goal of confidence-building, considerable patience and efforts, on the basis of comprehensive reciprocity, are required. We also recognize that the most effective approach is to begin with issues on which it is easy to reach mutual agreement and of which it is easy to verify implementation, and then to gradually expand the scope of the agenda addressed. With that in mind, the Republic of Korea endeavours to promote dialogue and people-to-people exchanges with a view to nurturing mutual trust and understanding.

Confidence-building measures on the Korean Peninsula

3. The Republic of Korea is well aware of the importance of mutual trust and sincerity for the sake of inter-Korean confidence-building, and it looks forward to the resumption of a serious dialogue with the Democratic People's Republic of Korea.

4. The Republic of Korea has expressed its willingness to have sincere discussions on how to implement existing inter-Korean agreements, such as the South-North Joint Communiqué of 4 July 1972, the Agreement on the Composition and Operation of Subcommittees for South-North High-Level Negotiations, the Joint Declaration on the Denuclearization of the Korean Peninsula, the South-North Joint Declaration (15 June 2000), and the Declaration on the Advancement of South-North Korean Relations, Peace and Prosperity (4 October 2007). Accordingly, the Republic of Korea is proposing the full resumption of dialogue for the further development of the inter-Korean relations.

5. In order to overcome the ideological confrontation and the long-standing antagonism and achieve peaceful reunification, implementing confidence-building measures on the Korean Peninsula is a key task. To that end, not only is a process of continued discussions and implementation necessary, but the understanding and the support of the international community are also essential to maintain the momentum.

Confidence-building measures in North-East Asia

6. The six-party talks, the framework aimed at the denuclearization of the Korean Peninsula, is a significant confidence-building process in countries of North-East Asia. In this context, the Republic of Korea has actively participated in the discussion on the North-East Asia peace and security mechanism within the six-party talks. At the two meetings of the North-East Asia peace and security mechanism working group held in 2007 (16 March, Beijing/20-21 August, Moscow), the Parties exchanged their views on various issues, including on guiding principles for multilateral security cooperation in North-East Asia.

7. The Republic of Korea has taken an active role in track 1.5 cooperation, such as through the Northeast Asia Cooperation Dialogue (NEACD) in addition to track 1 cooperation mentioned above. At the 18th meeting of NEACD, held in Moscow from 12 to 14 November 2007, the participants discussed ways to establish a security and peace mechanism in North-East Asia.

Confidence-building measures in the ASEAN Regional Forum

8. The ASEAN Regional Forum (ARF) is the only Asia-Pacific intergovernmental and multilateral security cooperative committee in which both the Republic of Korea and the Democratic People's Republic of Korea participate, and it has contributed greatly to peace and stability in the Asia-Pacific region, including the Korean Peninsula.

9. ARF engages in discussions on regional security issues of common concern to its participants, pursuing a gradual and systematic approach to confidence-building

measures, the development of preventive diplomacy mechanisms and the development of conflict resolution mechanisms.

10. ARF strengthens contact and mutual trust among countries by exchanging high-ranking officials through senior officials and foreign ministers meetings and conducting a midterm review of preventive diplomacy activities and confidence-building measures through the holding of its Inter-sessional Support Group Meeting on Confidence-building Measures and Preventive Diplomacy.

11. It also strives to enhance confidence-building measures in the military field by enhancing military transparency through the submission of its Annual Security Outlook and the voluntary release of its defence white papers. Furthermore, to that end, ARF hosts the Security Policy Conference attended by defence vice-ministers of member States to pursue active exchanges between military officials, the building of mutual trust, and discussions on confidence-building measures related to military issues.

12. Moreover, ARF provides opportunities to promote and encourage discussions through various forums for debates such as inter-sessional meetings, seminars, and workshops, not only to find solutions to common issues that undermine security in the area, such as terrorism, piracy, natural disasters, humanitarian issues, and transnational crimes, including illegal drug trafficking, but also to identify valuable measures for United Nations peacekeeping operations and energy security. This progressive strategy is believed to be highly effective in that it encourages discussions on specific issues and naturally serves to reinforce confidence-building.

Confidence-building measures in the Context of the Conference on Interaction and Confidence-building Measures in Asia

13. The Republic of Korea has been participating actively in the discussions to promote confidence-building in the Asian region. As part of these efforts, it hosted meetings of the Senior Officials Committee and the Special Working Group of the Conference on Interaction and Confidence-building Measures in Asia in June 2008.

14. The Conference on Interaction and Confidence-building Measures in Asia (CICA) seeks to build confidence through increased cooperation in non-military fields such as the development of safe transportation routes, the fight against the illegal drug trade, the management of national disasters, people-to-people exchanges, information technology, energy resources, economy and tourism. Since June 2008 CICA has been seeking to adopt a concept paper and an action plan on each field.

Spain

[Original: Spanish]
[16 June 2008]

1. Confidence- and security-building measures contribute to transparency and reduce the potential for misunderstandings that could contribute to an escalation of local conflicts and accidentally trigger hostilities. The smaller the geographical area, the easier it is to tackle specific issues that could give rise to tensions.

2. Confidence- and security-building measures adopted in a regional or subregional area make it possible to adapt global agreements to the conditions of each region, thus making them more coherent. A knowledge of the region's security dynamics can be used to make progress, for example, in reducing arms ceilings, agreeing on lower thresholds for the notification of military activities, or defining zones that are free from specific types of weapons.

3. Furthermore, at the regional level it is more feasible to adopt joint approaches for settling disputes: prevention, resolution and management of conflicts, including through good offices and mediation support.

4. Regional organizations are in an excellent position to understand the underlying causes of local armed conflicts in view of their better knowledge of the region, so that their efforts to influence conflict prevention or resolution are timely and appropriate, facilitating a rapid response in the case of disputes and emerging crises.

5. The establishment of confidence- and security-building measures facilitates regional dialogue and encourages the sharing of experiences. One example is the struggle against trafficking in persons, arms and psychotropic substances in the area of the Organization for Security and Cooperation in Europe (OSCE). It is based to a large extent on border control training programmes which facilitate the dissemination of the same procedures throughout the OSCE region, generating synergies which make national efforts more effective.

6. Cooperation initiatives at the regional or subregional level are beneficial not only for those receiving assistance. The donors and the region as a whole also see an improvement in the level of security. Moreover, for the cooperation to reach the proposed goals it must have sustainable financial support which evolves with the situation and gives priority to areas of higher risk, issues which are easier to evaluate in the regional or subregional context.

7. These regional or subregional measures must take into account the unique situation of the area and they should give priority to responding to the instabilities of greatest concern in the region. At this level it is easier to make progress in implementing the agreed measures, so that new measures can make the existing ones more efficient or be adapted to new challenges.

8. The regional and global approaches to disarmament should be complementary and be applied simultaneously in order to promote regional and international peace and security.

Ukraine

[Original: Russian]
[8 May 2008]

Information on the implementation by Ukraine of General Assembly resolution 62/45, entitled "Confidence-building measures in the regional and subregional context"

In accordance with chapter X of the Vienna Document 1999 of the Negotiations on Confidence- and Security-Building Measures, Ukraine complies with the bilateral agreements which it has concluded with neighbouring States on additional confidence- and security-building measures:

The agreement between the Cabinet of Ministers of Ukraine and the Government of the Republic of Hungary of 27 October 1998 on confidence- and security-building measures and the development of bilateral military contacts;

The agreement between the Cabinet of Ministers of Ukraine and the Government of the Slovak Republic of 30 August 2000 on additional confidence- and security-building measures;

The agreement between the Cabinet of Ministers of Ukraine and the Government of the Republic of Belarus of 16 October 2001 on additional confidence- and security-building measures;

The agreement between the Cabinet of Ministers of Ukraine and the Government of the Republic of Poland of 16 April 2004 on additional confidence- and security-building measures.

United Nations A/63/172

General Assembly

Distr.: General
25 July 2008

Original: English

Sixty-third session
Item 58 (d) of the provisional agenda*
Social development: United Nations Literacy Decade: education for all

Implementation of the International Plan of Action for the United Nations Literacy Decade

Note by the Secretary-General

The Secretary-General hereby transmits the report of the Director-General of the United Nations Educational, Scientific and Cultural Organization on the implementation of the International Plan of Action for the United Nations Literacy Decade in accordance with General Assembly resolution 61/140.

* A/63/150.

08-43970 (E) 190808

Implementation of the International Plan of Action for the United Nations Literacy Decade

Report of the Director-General of the United Nations Educational, Scientific and Cultural Organization

Summary

In its resolution 56/116, the General Assembly proclaimed the 10-year period beginning on 1 January 2003 the United Nations Literacy Decade (UNLD).

At its halfway point, UNLD gives reason for cautious optimism regarding progress in youth and adult literacy rates, and has begun to put literacy higher on the international agenda. In places, national policies have led to more dynamic structures and increased funding for literacy. However, international support for literacy remains low. High numbers of non-literate young people and adults (774 million), particularly women, and slow advances in South and West Asia and sub-Saharan Africa remain of concern. The diverse contexts of marginalized populations need special attention. In today's knowledge societies, literacy needs continue to evolve across developing and developed countries, and will require greater commitment and further innovative efforts in the second half of the Decade.

Contents

		Paragraphs	Page
I.	Introduction	1–7	4
	A. Purpose and nature of the report	1–2	4
	B. Literacy: an evolving concept	3–4	4
	C. Literacy in a broader perspective	5–7	5
II.	Highlights of the first half of the Decade	8–14	5
III.	Literacy in the world today	15–32	7
	A. Evolving world and regional literacy rates	16–19	7
	B. Literacy learning	20–24	8
	C. Inclusive literacy	25–32	9
IV.	Key areas of action	33–68	11
	A. Policy	34–46	11
	B. Programme design and delivery	47–52	14
	C. Research, assessment and evaluation	53–62	15
	D. Advocacy for literacy	63–68	16
V.	Financing of adult literacy	69–83	17
	A. Literacy programme funding	69	17
	B. Sources of funding	70–78	18
	C. Costs of quality literacy programmes	79–83	19
VI.	Perspectives for the future	84–91	20
	A. Learning from experience	86	20
	B. Shaping the literacy agenda: the next five years and beyond	87–91	21
Annex			
	Adult (15+) regional literacy rates (1985-1994 to 2000-2006)		24

I. Introduction

A. Purpose and nature of the report

1. This report is submitted by the Director-General of the United Nations Educational, Scientific and Cultural Organization (UNESCO) in fulfilment of the request by the General Assembly in its resolution 61/140 that UNESCO "prepare and conduct the mid-Decade review in collaboration with all Decade partners during 2007 and 2008". This report, which follows those of 2004 (A/59/267) and 2006 (A/61/151), takes as its starting point the International Plan of Action for the United Nations Literary Decade (UNLD) (see A/57/218 and Corr.1) and presents an assessment of progress in the areas of priority outlined there. The report captures the status, trends and challenges of literacy at the midpoint of the Decade, with a focus on non-literate youth and adults, i.e. those who have no or low literacy skills. The report also provides a framework for planning the second half of the Decade.

2. The right to education includes the right to literacy, an essential condition of lifelong learning and a vital means of human development. The vision of Literacy as Freedom and Literacy for All remains as relevant now as it was at the start of the Decade. Literacy leads to empowerment, a key to communication and learning of all kinds; it is a fundamental condition of participation and access to information in the knowledge societies of the twenty-first century. It remains a grave concern that one in five adults in today's world — 774 million in total — has no access to written communication through literacy, that 75 million children remain out of school, and that millions more young people leave school without a level of literacy adequate for productive and active participation in their societies. This situation is unacceptable; the challenge is urgent and compels all partners to deepen their commitment and strengthen their action. The second half of the Decade will focus on making this happen.

B. Literacy: an evolving concept

3. Literacy stakeholders recognize the multiple dimensions and the evolving nature of literacy, with new literacies emerging and changing patterns of learning, including the use of digital technologies. This has led to greater adaptation of provision to the needs and circumstances of learners and to higher levels of innovation.

4. In the first half of the Decade, evolving ideas about the nature of literacy have enriched debates, and informed policy and practice. Recent studies draw attention to the importance of social contexts and the sources of literacy inequalities. They highlight a continuum of literacy competencies and the existence of multiple literacies and practices, rather than a literate/illiterate dichotomy. Moreover, the concept of the literate environment has focused on the uses of literacy for new opportunities and active citizenship and has broadened the scope of literacy policy to involve work with the producers and users of everyday texts, rather than simply the providers of literacy teaching programmes. Concepts of adequate literacy and the literate environment are informed by rapidly changing modes of communication associated with digital technologies and globalization.

C. Literacy in a broader perspective

5. Literacy is a key condition for reducing poverty and achieving all the Millennium Development Goals; illiteracy rates are highest in the countries with the greatest poverty. Education is a major element of the poverty reduction strategy paper; however, a review of 18 papers revealed that, in most countries, plans included the education-related Millennium Development Goals but made little reference to adult literacy or non-formal education. Although the literacy rate of 15- to 24-year-olds, women and men, is an indicator of goal 2, the connections between literacy and poverty reduction were not directly addressed.

6. Literacy is a fundamental tool for learning of all kinds and therefore a cross-cutting issue in the six Education for All (EFA) goals; however, the specific goal on adult literacy (goal 4) has been seriously neglected. Literacy for All, situated at the heart of EFA in the Decade, has contributed to recent shifts in EFA policy (e.g. improving the quality, relevance and retention of skills within formal as well as non-formal education systems).

7. Other educational plans and initiatives reinforce UNLD by linking literacy with other aspects of learning. The United Nations Decade of Education for Sustainable Development (2005-2014) emphasizes the potential of education to influence our values, behaviour and the way we live, for which literacy provides a channel of expression. In 1997, the fifth International Conference on Adult Education set literacy within a new vision of adult learning based on the understanding that we cannot deal with global risks without an active and informed citizenship. The sixth International Conference will take place in May 2009 in Brazil, with literacy once again as a vital theme.

II. Highlights of the first half of the Decade

8. This section presents positive and encouraging highlights of the first half of the Decade while also noting areas where it has yet to develop its full potential.

9. The Decade serves as a rallying cry and banner for renewed international commitment to literacy. Ever since the World Conference on Education for All: Meeting Basic Learning Needs in 1990 endorsed the expanded vision of basic education, which was reaffirmed in the six EFA goals adopted at the World Education Forum in 2000, the promotion of literacy for all age groups and as part of quality basic education has been an explicit international commitment. In setting up UNLD, the countries of the world were clearly determined to give literacy a still higher profile and stimulate greater efforts. At its halfway point, the Decade continues therefore to be a reference point and a banner under which to pursue even more vigorously the vision of literacy for all as the foundation of lifelong learning and a tool for empowering individuals and their communities.

10. New commitment to literacy has borne fruit through the Literacy Initiative for Empowerment (LIFE). LIFE is a global strategic framework for collaborative action to enhance literacy efforts in 35 countries that have a literacy rate of less than 50 per cent or an adult population of more than 10 million without literacy

competencies.[1] Together, these countries represent 85 per cent of the functionally illiterate adults in the world. Coordinated by UNESCO through its Institute for Lifelong Learning, LIFE is already an effective catalyst for planning, capacity development, partnership-building and the mobilization of new funds for literacy.

11. A number of countries have taken important action in strengthening their literacy policies, which has led to a noteworthy decrease in the total number of illiterates. Larger changes in strategy within international development policies, in particular, attention to equitable growth, governance and social inclusion, have also given greater policy focus to literacy.

12. Fresh momentum, new policies and stronger institutions emerged from a series of regional and subregional conferences on literacy. In a number of countries across Africa, Asia and Latin America and the Caribbean, new policies put literacy higher on the agenda, in some cases with the creation of new ministries, budget increases and greater cooperation between departments. These developments were facilitated by a series of six UNESCO Regional Conferences in Support of Global Literacy.[2] These events built on the initiative of the First Lady of the United States of America, Laura Bush, who organized the White House Conference on Global Literacy in September 2006 in New York in her capacity as Honorary Ambassador of UNLD. An outcome of the African Regional Conference, held in Bamako, for example, has been the active engagement of the First Ladies of Burkina Faso, Mali, Mozambique and Niger. Demands for greater regional collaboration emerged from all regions, an indication that the second half of the Decade should develop appropriate networks for these purposes. Identification of good practices and their dissemination have expanded the knowledge base on enabling factors for effective literacy programmes and promoted South-South cooperation.

13. Clearer evidence provides a stronger platform for promoting literacy. Recent editions of the EFA Global Monitoring Report have provided data and analyses which show the value and benefits of literacy and demonstrate the need for specific attention to literacy in terms of both policies and resources, with appeals to the international community to act commensurately with the challenge.

14. Improved methodologies of assessment and monitoring provide a better basis for planning and action. Traditional methods of assessing literacy levels among populations do not generate reliable data. The Literacy Assessment and Monitoring Programme (LAMP) by the UNESCO Institute for Statistics is being piloted to arrive at a more complete and detailed assessment of current literacy levels, as a basis for better analysis of the challenge and more targeted action. In the area of literacy provision, the Non-formal Education Management Information System (NFE-MIS) developed by UNESCO has been introduced in eight countries. This system allows countries to map NFE and literacy provision as well as to monitor and evaluate the implementation of their NFE programmes and measure progress towards their literacy policy goals.

---

[1] Afghanistan, Bangladesh, Benin, Brazil, Burkina Faso, Central African Republic, Chad, China, Democratic Republic of the Congo, Djibouti, Egypt, Eritrea, Ethiopia, Gambia, Guinea, Guinea-Bissau, Haiti, India, Indonesia, Iran (Islamic Republic of), Iraq, Madagascar, Mali, Mauritania, Morocco, Mozambique, Nepal, Niger, Nigeria, Pakistan, Papua New Guinea, Senegal, Sierra Leone, Sudan, Yemen.

[2] The Summary Outcomes of each conference may be accessed at: www.unesco.org/education/en/literacy/conferences.

III. Literacy in the world today

15. This section captures trends over the first half of the Decade, in terms of both quantitative and qualitative assessments of achievement and changes in conceptual and policy approaches to literacy. The following analysis is based on the statistics provided by the UNESCO Institute for Statistics' web page (June 2008)[3] and provides a detailed statistical picture. This analysis is limited to comparing the periods 1985-1994 and 2000-2006 to indicate likely trends over time. Data refer to the most recent year available during the period specified.

A. Evolving world and regional literacy rates

16. The number of adults who are not literate has been steadily decreasing: from 871 million during the period 1985-1994 to 774 million in the following period (2000-2006). Between these periods, the global adult literacy rate rose from 76 per cent to 83.6 per cent, with the largest increase occurring in developing countries (from 68 per cent to 79 per cent). However, these figures do not reveal the persistence of considerable regional, national and subnational disparities in access to literacy opportunities according to gender, age, ethnicity, location and economic status. Achieving literacy competencies that are adequate for the needs of today's knowledge societies also remains a concern in so-called developed countries.

17. The distribution of the 774 million non-literate adults in the world is of particular significance as more than 75 per cent of them live in only 15 countries, including Bangladesh, Brazil, China, India, Nigeria and four other high-population countries. In areas of high population growth, increased literacy rates do not necessarily indicate a decline in the absolute number of non-literate adults, as is the case in some countries of sub-Saharan Africa, where the number of non-literate adults increased from 133 million to approximately 163 million, and in the Arab States, where the increase was from 55 million to 58 million. While youth literacy in all regions has increased more rapidly than adult literacy overall, certain areas saw increases in the number of non-literate young people due to high population growth and low school completion rates.

18. Looking at the regional picture (see annex), the greatest increases in literacy rates between the two periods were achieved in the Arab States and South and West Asia, with 13.8 per cent and 16.1 per cent increases respectively, as compared with 8.3 per cent in sub-Saharan Africa and 11 per cent in developing countries overall. Though Latin America and the Caribbean had only a 4 per cent average increase, the literacy rate was already over 86 per cent in the 1985-1994 period. Within the region, huge differences remain, with Guatemala having achieved only an 8.3 per cent increase between the two decades (from a literacy rate in the first period of 64 per cent) as compared with Argentina and Uruguay with over 95 per cent literacy rates in both periods. Among the Arab States, the highest increases in literacy can be observed in Egypt (an increase of 27 per cent), Algeria (25 per cent), Kuwait (18.8 per cent) and Yemen (20 per cent). Significantly, many of these countries had extremely low literacy rates in the earlier period (only 44.4 per cent of people in Egypt were literate in the period 1985-1994).

[3] http://stats.uis.unesco.org/.

19. According to projections from the UNESCO Institute for Statistics, the global trend towards higher literacy rates will show only a small improvement by 2015 (3.3 per cent from 2000 to 2006); based on current projections, the global adult literacy rate should reach about 86.9 per cent in 2015. Some bright spots include a projected reduction among females in the 15-24 age group, with the number of non-literates decreasing from 76 to 50 million. However, the proportion of women among all non-literate adults is expected to decline by only 1 per cent. Regionally, illiteracy among the 15-24 age group in South and West Asia is projected to decrease by about a third, from 67 to 46 million. However, three quarters of the 127 countries for which projections were calculated will miss the goal of halving adult illiteracy rates by 2015. Unless progress is significantly accelerated, most countries in sub-Saharan Africa, South and West Asia and the Arab States have a small chance of reaching this goal.

B. Literacy learning

1. Literacy in schools

20. Analysis of the effectiveness of literacy learning in schools cannot be separated from current debates about how to improve the quality of basic education in developing country contexts. Issues around the quality and relevance of primary education in particular have been associated with high drop-out rates, poor retention of literacy and other skills and the problems faced by school leavers in finding employment. Literacy is increasingly identified as a particularly important area of the curriculum for laying the foundation of success in other subjects too.

21. Various assessment programmes, for example the Programme for International Student Assessment and the Progress in International Reading Literacy Study; regional assessments, for example, the Latin American Laboratory for Assessment of the Quality of Education, the Southern and Eastern Africa Consortium for Monitoring Educational Quality and the Programme of Analysis of Educational Systems; and national assessments, for example, the Sistema de Medición de Calidad de la Educación in Chile and the National Assessment of Educational Progress in the United States, give an increasingly detailed picture of the level of literacy in schools, both across regions and within countries.

2. Literacy learning outside schools

22. Programmes targeting young adults and out-of-school children face a particular challenge in addressing the reasons why participants dropped out of school, such as inflexible timing, irrelevant curriculum, expenses, unfamiliar language as medium of instruction and gender bias. Equivalency or "second chance" programmes have been developed specifically to cater for the needs of this younger group and aim to provide access to an alternative route for gaining the same qualifications provided in the formal sector. These programmes are a common feature in most countries. For example, the UNESCO-led Joint Malagasy Government-United Nations System Programme for the Promotion of Basic Education for All Malagasy Children offers as one of its components the "school of the second chance" where the primary school cycle is covered in 10 months instead of five years.

3. Learning new literacies

23. The new digital literacy has created a divide in developed countries that is even greater in developing countries where resources for textbooks and basic school equipment are already lacking. According to the 2008 World Education Indicators cross-national study *A View inside Primary Schools*, in 7 out of 11 countries, half the primary schools had no computers for pupil use and the allocation of resources varied greatly within regions.

24. In the adult education context, information and communication technologies have been promoted both in terms of content and as a means of enhancing learning. In Viet Nam, community education centres and teacher training colleges electronically share resources and tested practices in literacy programmes. The explosive growth of access to mobile phones has enabled non-literate adults to use text messages to enhance their livelihoods: for example, fishermen in Bangladesh have compared prices by texting to possible market purchasers. Television, video and radio communication continue to be important means of literacy training in remote areas. The *Alam Simsim* television series in Egypt teaches basic literacy and mathematics, as well as encouraging improved health, hygiene and environmental practices.

C. Inclusive literacy

25. Inclusive literacy is not just about how to target literacy or schooling interventions effectively for specific marginalized groups, but also about the impact that literacy can have on transforming traditional gender, socio-economic and political inequalities within and between communities. Many of the characteristics of the groups mentioned below combine to increase marginalization, often exacerbated by rural/urban differences. There is also concern that "absolutely" non-literate people may be least able to benefit from literacy programmes, and this requires urgent attention.

1. Literacy and gender

26. There is a striking difference between the discourse on literacy and gender in developed as compared to developing countries. In developed and some middle-income countries, educators are concerned about boys' relative lack of achievement in literacy in schools. By contrast, in developing countries, policy has focused on women's and girls' marginalization from education, as signalled by the gender gap in adult literacy rates. This has hardly changed between the two periods (63 per cent of non-literate adults were women in 1985-1994 as compared with 64 per cent in 2000-2006). In both contexts, however, most emphasis has been placed on how to change structures, curricula and teaching approaches to ensure greater participation of the marginalized group (men or women) and rarely about how to use literacy to challenge or raise awareness about gendered assumptions, practices and texts.

27. Responding to research revealing the correlations between women's literacy and health improvements, many literacy programmes have specifically targeted women in their roles as wives and mothers and adopted a functional literacy approach. The Yemen Adult Literacy and Lifeskills Education programme combined literacy instruction with skills development in agricultural production, savings and loan clubs, environmental management, maternal and child health (including HIV

and AIDS awareness), political participation and women's rights. Within a rights-based approach to women's empowerment, literacy has a key role in emphasizing women's multiple identities and in leading to greater socio-economic and political participation.

2. Literacy and poverty

28. Poverty is strongly related to high illiteracy rates and gender inequalities. In Egypt, illiteracy rates for poor children are more than twice the rate among non-poor children. Poverty's impact on literacy surfaces in numerous ways. For example, the poorest participants in literacy programmes drop out of classes or do not enrol in the first place, and poor parents typically sacrifice their own education so as to ensure their children's. In Malawi, the hunger crisis of 2005/06 meant that income-generating activities linked to functional literacy (such as rearing pigs), within the Sustainable Social and Economic Empowerment Programme for Poverty Reduction, could not compete with producing food for people. Special attention must be given to literacy in rural areas, where most of the adult non-literate population of the world lives and where opportunities for quality learning and literacy acquisition are often less available. At the same time, there is an increasing need for literacy as a tool for rural development. Examples of good practices are the rural expansion of the Community-based Healthcare (REACH)/Learning for Life programme in Afghanistan which linked literacy with local services, for example by training women as paid community health workers, as well as the International Research and Training Centre for Rural Education in China.

3. Literacy and language

29. The opportunity to learn in one's mother tongue as well as learning to speak a language of wider communication was identified as an important human right in the UNDP *Human Development Report 2004*, to ensure that people are not excluded from education, political life and access to justice.

30. Decisions about which language to use are often influenced by limited resources for literacy and the implications of developing or translating learning materials into the languages spoken by a particular group. In West Africa, most initial development of local language publications has been initiated by non-governmental organizations (NGOs) in collaboration with national Governments. In countries where there is a multitude of languages, such as the Philippines and Papua New Guinea, great efforts have been made to ensure the use of mother-tongue instruction.

4. Literacy for specific groups

31. Literacy rates among indigenous groups, nomadic communities, child soldiers, working children and adults with disabilities remain comparatively low in many countries. Access to literacy learning is an aspect of the fulfilment of their broader human rights. As they continue to be excluded from mainstream education, some Governments have built an adapted curriculum to integrate them through non-formal education. The Sudan, for example, targets former child soldiers for non-formal education with the aim of rehabilitating these young people into mainstream society through a specialized curriculum. The growing number of non-literate or semi-literate young people has become a serious concern. For example, in the 1995-2004

period, there were an estimated 73 million young people in this category in South-West Asia.

32. Literacy interventions in the area of HIV and AIDS have offset social discrimination and taboos: as a result of the REFLECT programme in Orange Farm, South Africa, some participants tested for HIV and disclosed their status to each other and their families. In situations of post-conflict and post-disaster, literacy efforts reach those whose educational opportunities were curtailed as, for example, the Accelerated Learning Programme for Youth in Iraq and the LIFE focus on women in Afghanistan.

IV. Key areas of action

33. This section reports, under four major headings, on the key areas of action proposed in the UNLD International Plan of Action: policy; programme design and delivery; research, assessment and evaluation; and advocacy for literacy. Issues of capacity development and community participation are dealt with as cross-cutting issues.

A. Policy

1. Government policies: formulation and trends

34. Many national Governments have taken the lead in the development of literacy policy, for example, in developing their literacy situation analysis and integrating adult literacy into education plans and poverty reduction strategies. The strong response to LIFE illustrates the commitment of many countries to literacy.

35. There are strong policy commitments to youth and adult literacy within some countries. These include countries which have run national literacy campaigns in the first half of the Decade, such as Nigeria, India and Venezuela, while China's consistent policy over the last 15 years has given over 90 million people access to literacy. In countries participating in UNLD initiatives (e.g. the UNESCO regional Literacy Conferences in Support of Global Literacy, LIFE and LAMP), literacy is now higher on the national agenda.

36. In 2004, Morocco adopted a national literacy and NFE strategy, in the context of an integrated vision of literacy, development and poverty reduction, and in 2005 Niger issued a ministerial decree for the development of a new NFE policy which includes adult literacy. Mauritania put its National Strategy for the Eradication of Illiteracy into an operational workplan in 2006, linked to the poverty reduction strategy. In the Gambia, adult literacy has been integrated into the education policy and the policy reduction strategy paper.

37. Similar policy shifts are observed in many countries of South and West Asia, particularly in India and Bangladesh, where new literacy initiatives are integrated into the overall human resource development framework. The establishment of community learning centres in India and Afghanistan, non-formal basic education community schools in Pakistan and non-formal basic education centres and mass literacy centres in Bangladesh is illustrative of this trend. India further reinforced

policy through a drive to reduce residual illiteracy aimed at around 36 million non-literates between 2005 and 2007.

38. Further examples of increased policy commitment include Malawi (a revised National Literacy Policy), Senegal (with a threefold budget increase and a new national website on literacy), Benin (greater integration of action in literacy as part of EFA plans), Mali, Burkina Faso (a national task force to mobilize funds) and five further LIFE countries (Niger, Egypt, Morocco, Bangladesh and Pakistan), with national action plans developed in eight countries (Haiti, Mali, Niger, Nigeria, Senegal, Morocco, Bangladesh and Pakistan).

39. Through the regional meeting on the implementation of LIFE held in Maputo in 2008, the African Union demonstrated increased policy commitment to adult literacy and is considering an African charter for literacy and languages. South-South cooperation is growing, including Brazilian support for capacity-building in Haiti and Lusophone African countries, as well as Cuba's technical support to many Latin American countries and beyond.

40. In general, attention given to literacy in the EFA 2006 and 2008 Global Monitoring Reports and initiatives such as LIFE and the regional conferences have made a positive impact on the policymaking environment. One major challenge is that policy emphasis on the Millennium Development Goals led many Governments and donor organizations to prioritize universal primary education (UPE) over their broader EFA commitments, including adult literacy. Indeed, many national Governments and donor organizations have viewed primary education as the most efficient vehicle for achieving increased levels of literacy. This logic is explicitly stated in many policy documents, but often without sufficient modelling and analysis. As a result, low levels of adult literacy do not automatically result in higher policy commitments to adult literacy.

41. The LIFE programme supports increased policy commitment at national and international levels, including the development of country profiles, needs assessment, literacy capacity-building, and institutional development for programme design, management and delivery. Since responsibility for literacy is often spread across several ministries at the national level, there is a clear need for strong inter-ministerial cooperation and coordination.

42. In 2007, UNESCO facilitated regional studies on civil society organization (CSO) engagement in EFA policy formulation, through the NGO Collective Consultation of NGOs (CCNGO) on EFA. These studies showed that partnerships between civil society and Government have grown substantially. For example, 345 agreements were signed with NGOs in Morocco during 2006 by the ministry responsible for literacy. The "CCNGO Survey on CSO in EFA — Asia Pacific 2007" report, covering 11 national CSO coalitions, indicated CSO involvement in Government policy formulation to varying degrees, with some success in raising the profile of literacy and non-formal learning, for example in Bangladesh, India, Papua New Guinea and the Philippines.

2. Policies of multilateral institutions and donors

43. Within the multilateral system, support for literacy for youth and adults is embedded in the respective mandate of each agency. However, agency priorities do not yet adequately reflect the thrust of the Decade. UNESCO, as the specialized

agency for education and coordinator of the Decade, initiated three programmes within the Decade: the Literacy Initiative for Empowerment (LIFE), the Literacy Monitoring and Assessment Programme (LAMP) and the Non-formal Education Management Information System (NFE-MIS), all of which are detailed in other parts of this report. The United Nations Population Fund is particularly concerned for women's access to literacy and for the part it plays in giving access to information and learning on reproductive health, while the United Nations Children's Fund supports adult (female) literacy programmes and, in some contexts, non-formal equivalency programmes for out-of-school adolescents, which include literacy and numeracy. The Food and Agriculture Organization of the United Nations focuses on rural people and has promoted literacy among farmers and fishermen, linked with basic technical skills. In terms of offering education to child and adult refugees, the Office of the United Nations High Commissioner for Refugees facilitates access for refugees to the local school system, as for example in urban environments, and cooperates with NGOs in adult learning programmes as well as refugee camp education programmes. The World Bank is the largest external funder of education, with a focus on UPE. Its engagement with youth and adult literacy is less developed, with some commitment based on the instrumental role of adult literacy in expanding primary education, and in processes of poverty reduction and economic growth. This is illustrated by recent investments in adult literacy, e.g. in Senegal, Chile, the Gambia and other countries, and in NFE in Iraq.

44. Other agencies, such as the World Health Organization and the International Labour Organization, also have complementary concerns where literacy plays a role in access to information and work opportunities. Stronger networking and partnerships which leverage these comparative advantages are vital for fulfilling the UNLD goals.

45. Donor agencies integrate literacy to varying degrees into their policies on support to education. The policy documents of the United States Agency for International Development (USAID) have strongly advocated investment in literacy. This includes major initiatives, such as congressional budget support in 2008 for a number of important literacy initiatives in developing countries. Similarly, the Swedish International Development Agency policy includes support for Government Adult Basic Learning and Education programmes when they are based on clear political will at the national level. In 2007, the Organization of American States articulated a determined policy to promote universal literacy throughout the region. Spain is committed to support the Ibero-American plan for literacy, which also is part of the educational policy of the Organization of Ibero-American States. The European Commission[4] gave renewed emphasis internally to adult learning, urging its member States to develop a culture of lifelong learning, but this approach has not yet fed through to its international cooperation policy.

46. It is also important to recognize the important role of advocacy organizations in influencing policymakers. These include the Global Campaign for Education, which contributed significantly with the production of International Benchmarks on Adult Literacy,[5] and the Centro de Cooperación Regional para la Educación de Adultos en América Latina y el Caribe in Latin America.

[4] European Parliament Resolution of 16 January 2008, "Adult learning: it is never too late to learn".

[5] *Writing the Wrongs: International Benchmarks on Adult Literacy*, ActionAid International and Global Campaign for Education, November 2005.

B. Programme design and delivery

1. Delivering quality programmes

47. There have been improvements in modes of design and delivery and in pedagogy. These go some way towards answering the concerns of donors and others who look for higher quality of delivery and management in literacy programmes. Greater understanding of the diversity and context of literacy has led to more flexible implementation.

48. In programme design and delivery, the main challenge is to increase the scale of delivery, while adapting management systems, content, teaching methods and materials to respond to diverse contexts and needs. The multiple and diverse methods and approaches used in literacy teaching are a strength, responding to various contexts and population groups. In the first half of the Decade, there has been a growing recognition of the value of linking literacy learning directly to real-life uses of literacy and real-life texts and learner-generated materials. Information and communication technologies have transformed the ways literacy materials are produced, enabling rapid modifications of materials to suit the needs of diverse cultural and linguistic contexts.

49. The first half of the Decade has witnessed a good deal of innovation in pedagogical methods in literacy. "Initial literacy" includes conventional primer-based approaches, family literacy such as the Save the Children US programme Reading with Children (e.g. in Pakistan, Bangladesh, Afghanistan), the *Yo si puedo* method in some Latin American countries and other regions, community literacy and social literacy approaches (e.g. in India and Nepal), REFLECT (in at least 55 countries), those based on the Laubach "each one teach one" method (Bangladesh), critical literacy and legal literacy (Scotland, India, Nepal, Nigeria, Sierra Leone), and intercultural and multilingual literacy (e.g. Bolivia, Ecuador, Mexico, Paraguay, Peru, the Philippines, Senegal, South Africa). Some approaches adopt a campaign mode, while others involve national programmes or community-based initiatives. There are approaches that include the use of new information technologies and specialist methods developed for working with people with disabilities, learning difficulties and dyslexia. Family and intergenerational programmes have met with success, for example, in Pakistan, Turkey and the United States.

50. In many cases, literacy programmes are moving away from standardized materials and centralized delivery and towards more localized approaches. Innovations include shorter courses of focused instruction, literacy camps, in situ learning linked with wider socio-economic activities and work-based learning, and longer instruction linked to "post-literacy" courses and community learning centres.

2. Learning materials and new technologies

51. New information technologies enable more localized and flexible approaches towards materials development, including materials that are adapted to suit diverse cultural and linguistic groups. This is especially important for "initial learning" of "absolutely" non-literate learners, where a more structured approach to instruction is required. In the Sudan and Vanuatu, for example, NGOs have given special attention to addressing the dearth of reading materials.

52. Learner-generated materials can now be rapidly edited and reproduced using computer-based software and translated into local languages or bilingual formats. Examples include CD-based materials in Nepal that enable local adaptation for linguistic and cultural variation and in REFLECT, where participative material production is integral to the method.

C. Research, assessment and evaluation

53. One of the outcomes of the first half of the Decade has been to recognize the importance of research; this plays a key role in adult literacy and in the identification of literacy needs and aspirations, informing programme design, helping to improve quality and providing evidence of benefits.

1. Research

54. In addition to financial challenges, a major challenge in UNLD is enhancing research capabilities to enable improvements in literacy programme efficacy. Unfortunately, there is a lack of investment in research on adult literacy and insufficient collaboration between university departments and literacy providers. Some of the most pressing areas for research are: national-level assessments; research on the uses and impact of literacy; responses to linguistic diversity and changing literacy environments including digital literacies and information and communication technologies; and costs and benefits to improve programme quality. There is also scope for synergies between research on children's education and adult literacy (e.g. intergenerational benefits).

55. There have been significant improvements in the first half of the Decade in the application of qualitative research in literacy programmes. This includes the incorporation of ethnographic research into programme design, planning, implementation and evaluation. There are two major developments in this area: first, literacy programmes are increasingly informed by a recognition of the diverse social uses of literacy, including multiple scripts and languages; second, the integration of ethnographic and participatory research methods is being established as a characteristic of good practice.

56. While many countries with low adult illiteracy have strong research capacities, those with high levels of adult illiteracy often have weak institutions and capacities for literacy research. In order to achieve the UNLD aims, there is a need for major new investments in literacy research, including funding for (a) key programmes of research; and (b) long-term institutional development to enhance research capacities at the national, regional and international levels.

2. Assessment, monitoring and evaluation

57. The number of years of schooling has been shown to be a poor indicator of literacy levels. Improved literacy assessment will enable better mapping and analysis of the literacy situation in a given population and literacy needs. This requires better-quality data, and expanding the scale and coverage of literacy assessment.

58. For quantitative assessment of literacy levels among populations, "direct assessment" testing is steadily replacing "self-reported" assessment and the reliance

on census data; this enables analysis of literacy capabilities and inequalities by providing information on "levels" of literacy.

59. In this perspective, the Organization for Economic Cooperation and Development (OECD) is developing the Programme for the International Assessment of Adult Competencies, an assessment of literacy in the information age, understood as the "interest, attitude and ability of individuals to appropriately use socio-cultural tools, including digital technology and communication tools, to access, manage, integrate and evaluate information, construct new knowledge, and communicate with others". It will be operational in 2011, focusing principally on OECD member States. This builds on the International Adult Literacy Survey, the largest comparative survey of adult literacy ever undertaken (1994, 1996 and 1998), and on the Adult Literacy and Life Skills Survey (2003 and 2005).

60. At the national level, several States have conducted their own surveys, for example Austria, China, France, Kenya and the United States. The Kenyan survey drew on the LAMP methodology (see below) in an innovative approach to determining more precisely actual levels of literacy competence.

61. UNESCO is developing new approaches to adult literacy assessment through LAMP. This methodology is being developed by the UNESCO Institute for Statistics and is being piloted in El Salvador, Kenya, Mongolia, Morocco, Niger and the Occupied Palestinian Territories to arrive at a comprehensive and detailed assessment of current levels of literacy among populations, as a basis for better analysis of the challenge and more targeted action, and to develop national assessment capacity.

62. NFE-MIS has been developed by UNESCO based on the need to provide data on NFE programmes at the national level. The objective of NFE-MIS is to provide policymakers and planners with reliable, relevant and timely data to allow for informed decision-making, better planning and improved monitoring; building capacity and creating a culture of monitoring are essential in this.

D. Advocacy for literacy

63. The General Assembly gave the coordinating role for UNLD to UNESCO, in particular to "stimulate and catalyze the activities at the international level within the framework of the Decade".[6] Within the international EFA movement, the EFA High-Level Group, the principal mechanism for generating political will, addressed literacy as its theme in 2005, but stopped short of recommending any specific measures to increase efforts and investment in literacy.

64. The annual EFA Global Monitoring Report has consistently reported on progress in literacy, seeking to improve the quality of the data it uses and monitoring closely the fourth EFA goal: increasing adult literacy rates by 50 per cent by 2015. Each year, this report provides a detailed and increasingly disaggregated set of literacy statistics, serving as a platform of evidence for assessing how likely the achievement of the EFA literacy goal is. These statistics have led Global Monitoring Reports to characterize lack of literacy progress as a

[6] See resolution 56/116.

"disgrace" and a "scandal", a situation that the second half of the UNLD must address.

65. In order to demonstrate the multiple uses and value of literacy, the Decade adopted five biennial themes, which have been the focus for particular advocacy efforts: literacy and gender (2003-2004); literacy and sustainable development (2005-2006); literacy and health (2007-2008); literacy and empowerment (2009-2010); and literacy and peace (2011-2012).

66. With regard to civil society, advocacy for literacy took a step forward in February 2007 when the High-level Workshop on Adult Literacy, held in Abuja, adopted a Call for Action which promoted a benchmarking approach to literacy planning, providing a platform both for more focused advocacy for literacy and for stronger partnerships. In 2009, the Global Campaign for Education will take adult literacy as its theme for Global Action Week.

1. International literacy prizes

67. The UNESCO international literacy prizes reward outstanding efforts in the field of literacy and non-formal education throughout the world. The three prizes are: the International Reading Association Prize, the King Sejong Prize (Republic of Korea) and the Confucius Prize (China). Since the beginning of the Decade, these prestigious prizes have rewarded literacy projects and programmes undertaken by Governments and NGOs that stand out for their excellence and innovation at the national level or acting more broadly. The prize winners are mainly from developing countries; since the start of UNLD in 2003, literacy efforts in Bangladesh, Brazil, China, Cuba, India, Mauritius, Morocco, Mozambique, Nigeria, Pakistan, Senegal, Spain, South Africa, the Sudan, Turkey, the United Republic of Tanzania and the United States have been honoured.

2. International Literacy Day

68. International Literacy Day is celebrated every year on 8 September. It is an opportunity to remind the international community of the status of literacy and adult learning globally, attracting worldwide attention to this neglected goal. Each year, Governments, civil society and the international community therefore focus their advocacy activities on a particular topic, following the biennial themes of UNLD. To celebrate the Day, the international literacy prizes are awarded in a public ceremony often held at UNESCO headquarters in Paris.

V. Financing of adult literacy

A. Literacy programme funding

69. Some current signs of increased funding for youth and adult literacy cannot mask the relative neglect observed during the first half of the Decade. The challenges in literacy are not simply financial, but lack of adequate finance remains the most important barrier to progress. This affects programme costs and constrains higher-level institutional investments in programme quality, innovation, sustainability and research.

B. Sources of funding

1. Government funding

70. Financial commitment from Governments is the main source of funds for literacy and one that is most readily sustained and integrated in national education plans. Despite progress in levels of financial support for basic education by national Governments, priority has been given to the achievement of UPE. The interconnected nature of adult literacy with the other EFA goals and the Millennium Development Goals means that lack of financial commitment for literacy will reduce the scope for achieving the other goals. In the surveys undertaken for this report, many Government and civil society literacy providers identified lack of finance as a key concern.

71. Many countries only spend 1 per cent of their national education budget on adult literacy. A benchmark of a minimum of 3 per cent of education budgets for adult literacy has been promoted by the Global Campaign for Education and ActionAid, at the Abuja High-Level Workshop and within LIFE.

72. Many middle-income countries are able to meet their own financial needs for adult literacy. This includes some of the countries with high numbers of functionally illiterate youth and adults (such as Brazil, China and India). India increased its adult literacy expenditure by 50 per cent in 2008-2009 and had planned to multiply the allocation threefold. During the first half of the Decade, several countries participating in LIFE have increased their budgets for literacy. For example, Burkina Faso increased the share of education funding for literacy from 1 per cent to 7 per cent, in Senegal the budget increased from 1 per cent to 3 per cent, and in Mali, it increased from 500 million to 4 billion CFA francs.[7] Several countries have established new national funds for literacy, enabling support from a diversity of funding providers, and integrated adult literacy into national education plans.

73. The lack of financial capacity severely undermines progress in literacy. There are three reasons for such lack of financial commitment: resource constraints; technical constraints (e.g. in assessment and financial planning); and an unfavourable policy environment.

2. Funding from bilateral and multilateral organizations

74. In the first half of the Decade, donor policy has largely favoured the achievement of UPE and this has been a brake on progress towards UNLD objectives. This emphasis has been particularly evident in the EFA Fast Track Initiative which has allocated minimal funding thus far to EFA goals other than UPE. The picture, however, is not entirely bleak. LIFE has helped to access funds from bilateral and multilateral agencies to meet funding shortfalls and support a major literacy drive (e.g. in Afghanistan, Mauritania, Niger and Papua New Guinea). Through UNESCO, Afghanistan is receiving a $13 million aid package from Japan to improve literacy, which will benefit 600,000 non-literate youth and adults. In Benin and Burkina Faso, Governments argued vigorously for and secured some literacy funding from the EFA Fast Track Initiative.

[7] See www.unesco.org/uil.

75. There are also many important examples of bilateral and multilateral agencies working with Governments to improve institutional capacities and provision, such as European Union support in Mauritania, Swiss support in Burkina Faso, and support from the Government of Japan for Papua New Guinea. The Spanish Agency for International Cooperation supports adult literacy programmes in the Dominican Republic, El Salvador, Haiti, Honduras, Nicaragua, Paraguay and Peru. On the basis of a sector-wide approach, the Department for International Development of the United Kingdom bases its support on its 2001 position that improved adult literacy encourages parents to send their children to school and provides ongoing assistance for literacy including programmes in Uganda, Yemen, India and China, as well as specific commitments to increasing literacy provision in South Asia. USAID has made investments in adult literacy, family literacy and non-formal education, including programmes in Afghanistan, Pakistan and Kosovo.

76. There are some major limitations to and weaknesses in the financial support from bilateral and multilateral donor organizations:

(a) The scale of financial assistance has in general been clearly insufficient to meet the adult literacy challenges of UNLD;

(b) Capacity and institutional mechanisms on the whole are not friendly towards enabling funds to be dedicated to adult literacy; this has most clearly been evident in the EFA Fast Track Initiative;

(c) Sustained commitment to literacy has generally been lacking.

3. Civil society and private sources of funding

77. In a 2008 survey of civil society organizations carried out by UNESCO, less than half of the organizations reported receiving funds from Governments. Most relied on multiple sources of funding from international donor organizations and other sources. Many of the organizations viewed inadequate access to funds as a challenge, citing funding problems including the continuity of funding and insufficient funds to enable responses to expressed needs.

78. Private organizations (e.g. multinational corporations, philanthropic foundations, private donors, religious organizations, individual and community benefactors) provide an important additional source of funding for literacy programmes; however, there are few figures on the extent to which such sources of funding contribute to literacy programmes.

C. Costs of quality literacy programmes

79. In the first half of the Decade, there has been some progress in terms of costing literacy programmes, with a growing consensus (based on surveys of international experience) that unit costs of literacy programmes should be between $50 and $100 per learner per year, with higher costs being associated with higher quality and returns.

80. Caution is required, however, in comparisons of costs because of differences in what is included and excluded and the outcomes that one might reasonably expect, as documented in a range of studies of countries such as Bangladesh, Brazil, Burkina Faso, Ghana, Indonesia, Namibia, Senegal, Somalia, South Africa, Turkey

and Uganda. In Brazil, research showed that costs range from $40 to $182, but warned that low costs undermined the ability of programmes to maintain norms of provision such as contact hours. The figure of $50-100 per learner probably also underestimates the cost of human resources and institutional development, e.g. initial and in-service training, professional development, research capacity, venues and equipment, areas where neglect undermines quality. Capacity development in all areas of literacy provision is one of the major areas that requires higher levels of funding.

81. The costs of illiteracy, even though not yet well understood,[8] must be factored into the assessment of literacy programme costs, the cost of doing nothing, or of doing something badly, may be as much as the investments that are required.

82. Literacy needs are not static. They change and evolve (e.g. to accommodate new technologies, languages, economic situations), and require ongoing investment. Financial commitment to EFA goal 4 should therefore combine immediate efforts to achieve the goal, with a commitment to long-term, sustained funding of literacy programmes (including institutional and research capacities, and budget support mechanisms) as an ongoing commitment to adult literacy as a human right and a key intervention in human development.

83. It is estimated that at least $2.5 billion would be required annually, involving investment in adult literacy by national governments and donor organizations.

VI. Perspectives for the future

84. We need a new agenda for literacy, one that firmly embeds literacy in the right to education and the goal of sustainable development. Literacy is always part of the wider picture of achieving full individual potential, learning for growth and change, communication within and across cultures, and participation in social and economic opportunities. It is linked to both the global and the local, as locally meaningful literacy learning and use also offer access to global horizons. In today's societies, where knowledge and the processing of information are increasingly the means of social mobility and economic progress, learning throughout life is the norm, and literacy is a key to doing so.

85. This agenda reaches beyond the end of the Decade in 2012. It looks to the long term as literacy use evolves, requiring new skills and sustained commitment to patterns of lifelong learning.

A. Learning from experience

86. The following overarching lessons and challenges emerging from the first half of the Decade provide the basis for renewing and orienting action in the second half:

(a) At the global level, the challenge of literacy inequalities remains undiminished. Without increased commitment to adult literacy, targets for reduction in literacy rates will be unreachable in many countries due to demographic considerations, intergenerational effects and poor-quality schooling.

[8] Studies have been carried out in the Netherlands and Switzerland, and one is currently (2008) being undertaken in Latin America on this issue.

(b) Ensuring adequate and appropriate provision to diverse population groups will require that improvements in mass literacy not be accompanied by decreasing linguistic and cultural diversity of minority and indigenous groups. In addition, provision for women, young people and rural populations is often inadequate.

(c) Progress on adult literacy policy has been hesitant. While noting in some contexts increased policy commitment (and financial support) for education, commitment to adult literacy has been considerably less than to primary education.

(d) The delivery and management of literacy programmes include three main challenges: (a) to improve national-level literacy development strategies and coordination to ensure adequate coverage and targeting; (b) to ensure quality programmes which are based on the needs of the learner; (c) to improve monitoring and financial planning mechanisms.

(e) There is currently a high (and largely unmet) demand for technical and financial assistance to enhance research capabilities in adult literacy, particularly in the countries with the most severe literacy challenges. Literacy programmes are increasingly informed by formative research, while research on benefits is widely viewed as necessary to inform "evidence-based" policy.

(f) The scale of funding for adult literacy is insufficient for the size and nature of the task.

B. Shaping the literacy agenda: the next five years and beyond

87. In order to shape the literacy agenda, there is an urgent need for renewed momentum, with fresh and innovative ideas and a clearly articulated vision. In the light of the General Assembly's call[9] to all stakeholders in literacy to enhance their commitment and action in support of the Decade, it is imperative that

(a) Member States give literacy higher priority within their educational planning and budgeting, strengthening national and subnational professional institutions and fostering greater collaboration among all literacy partners;

(b) UNESCO continue to strengthen its coordinating and catalysing role, and that it draw on the results of this mid-Decade review and on the outcomes of the 2007-2008 regional Conferences in Support of Global Literacy to develop a strategic framework for renewed cooperation and action in literacy, in cooperation with international partners in literacy, including the agencies of the United Nations system;

(c) The international community deepen its collective commitment to literacy, with greater integration into international development targets, such as the Millennium Development Goals, and intensify efforts to implement the UNLD International Plan of Action.

88. The next five years (2008-2012) must focus on making a difference in the three major areas described below, forming the basis for strategic development and subsequent action:

[9] See resolution 61/140.

1. Stronger commitment

89. The 774 million adults without literacy skills, while heterogeneous in their characteristics, constitute as a whole a group that needs greater attention, with particular concern to addressing issues of gender, young people and marginalization. It is not until there is, on the one hand, a much stronger consciousness of the educational injustice which such adults suffer and, on the other, a stronger conviction of the benefits of literacy and the costs of illiteracy that there will be a change of policy. This will require:

(a) Advocacy on a much bigger scale, based on the right to basic education, the right to development, the essential need for literacy in today's knowledge-based economy, and the fundamental value of literacy as an indispensable tool for further learning opportunities in the framework of lifelong learning;

(b) Clear policy formulation on literacy as part of the education sector, particularly at the national level, based on attested evidence and building on standard-setting, quality assessment and benchmarking;

(c) Improving assessment, monitoring and evaluation of literacy to ensure efficient policymaking and planning for literacy and the monitoring of the progress made towards policy objectives as well as the implementation of literacy programmes;

(d) Stronger partnerships and alliances at the national, regional and international levels based on a common vision of the role of literacy, on mutual support and comparative advantage.

2. More effective delivery on the ground

90. This report underlines the tough challenges of programme design and delivery, calling for a determination to orient national and international support to the needs and characteristics of communities. Capacity development at all levels is a critical dimension of effective literacy provision, which will also require:

(a) Documentation and dissemination: improving the collection, dissemination and use of information on effective practices and policies and providing a platform for knowledge exchange;

(b) Increasing the scale and quality of delivery, while adapting management systems, teaching methods and materials to respond to diverse contexts and needs, with approaches that involve high levels of community participation;

(c) Enriching the literate environment, through the promotion of authorship, printed and electronic materials, publishing and distribution;

(d) Capacity development in all aspects of literacy, from material production and facilitator training to management, monitoring, evaluation, research and planning;

(e) Research to provide evidence-based data to policymakers demonstrating the benefits of literacy skills as well as information on factors that contribute to the quality of provision and outcomes of literacy programmes.

3. New resources for literacy

91. This report has identified the low level of funding for adult literacy as a key constraint in achieving the goals of the Decade; urgent action is required, particularly:

(a) Increased allocation of funds for adult literacy: dedication of at least 3 per cent of national education budgets for adult literacy and increased financial support to achieve this from bilateral and multilateral donor organizations;

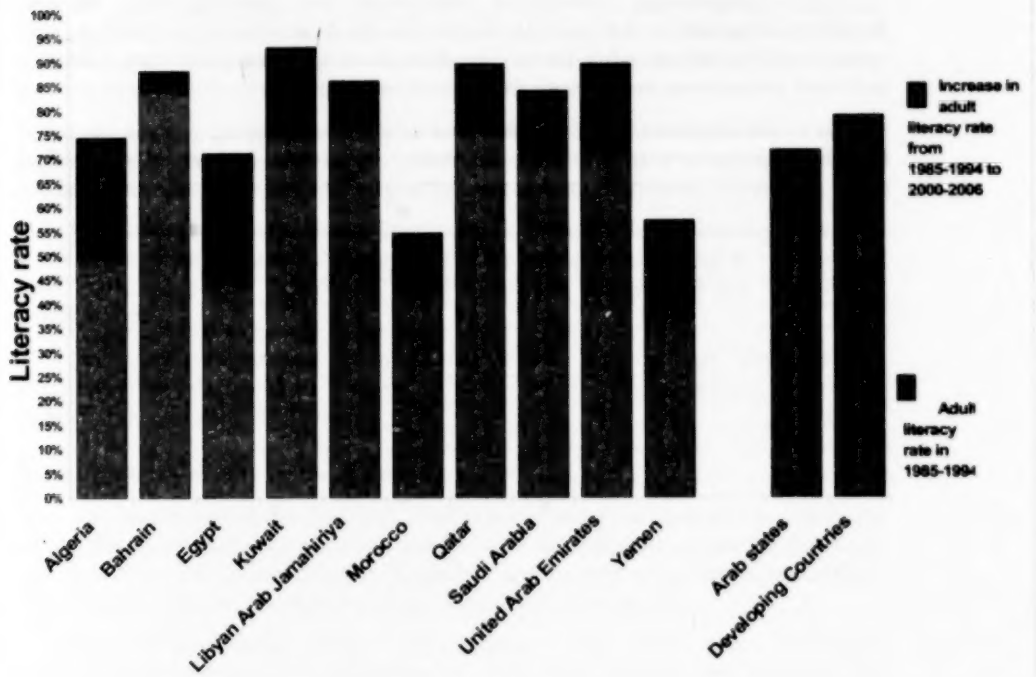
(b) Strengthening institutional mechanisms for financing adult literacy: flexible mechanisms to facilitate provision through diverse providers, with a clear commitment to include adult literacy investments in the EFA Fast Track Initiative and other institutional mechanisms for poverty reduction;

(c) Development of new models and databases on literacy programme costs, including components of provision, to enable comparison of literacy programme costs, and greater adaptation to meet the challenge of diverse needs and contexts.

Annex

Adult (15+) regional literacy rates (1985-1994 to 2000-2006)[a]

Figure 1
Increase over time in Arab States' adult literacy rate



[a] The charts show countries for which comparative data were available for the periods indicated and at the time of compiling this report.

Figure 2
Increase over time in Central and Eastern European adult literacy rate

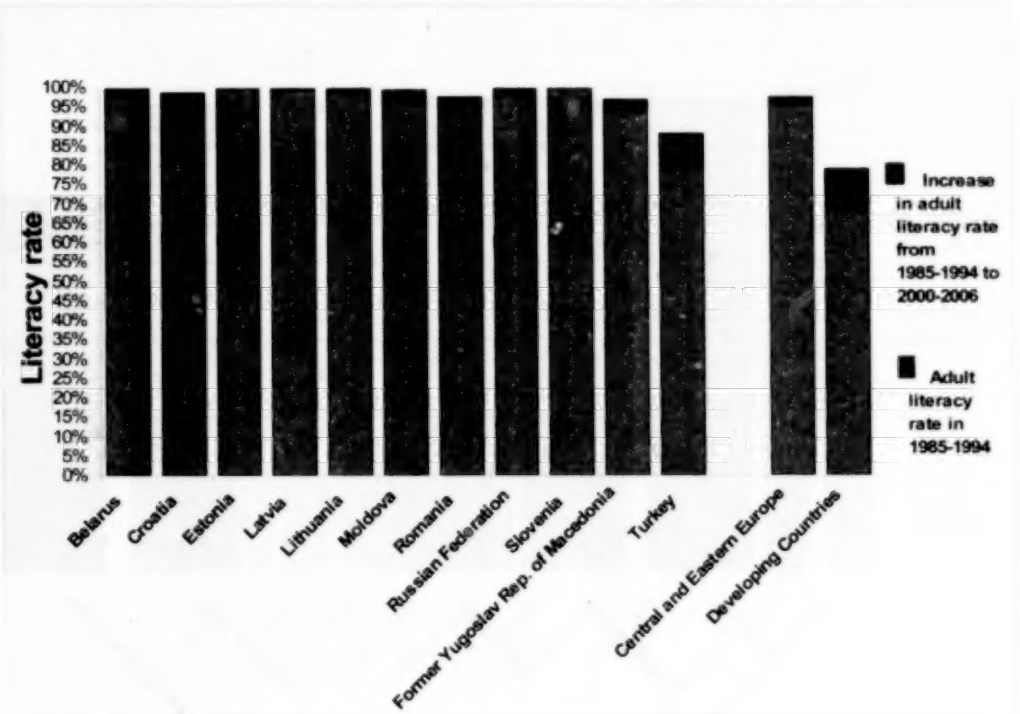


Figure 3
Increase over time in Central Asian adult literacy rate

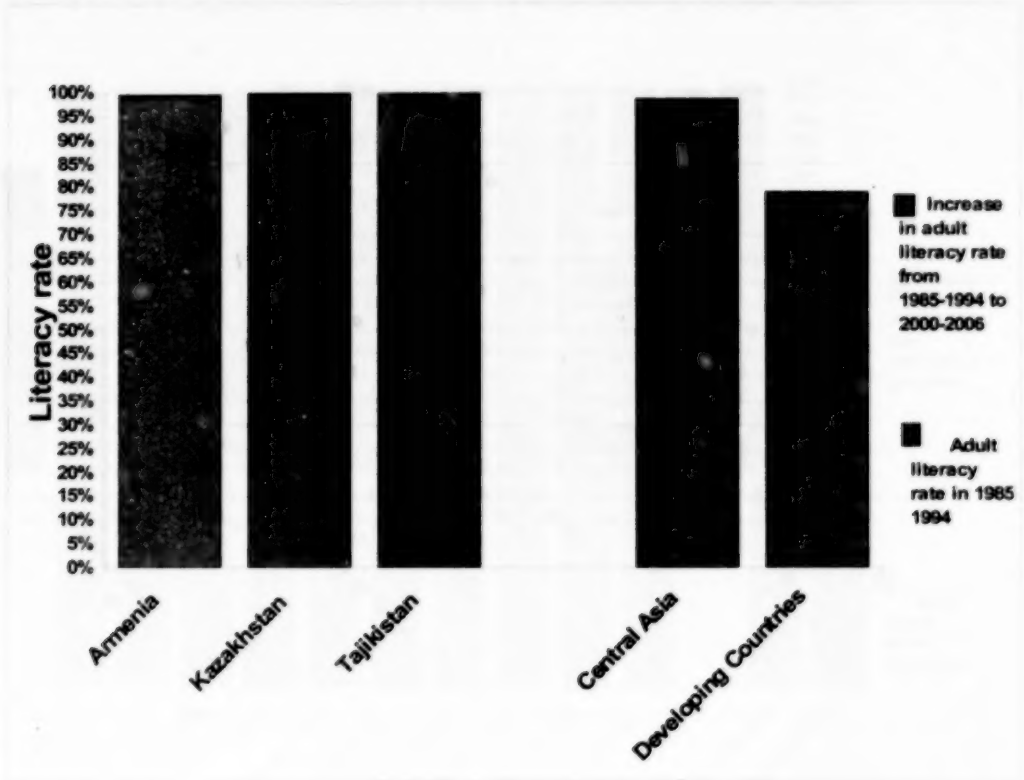


Figure 4
Increase over time in East Asian and Pacific adult literacy rate

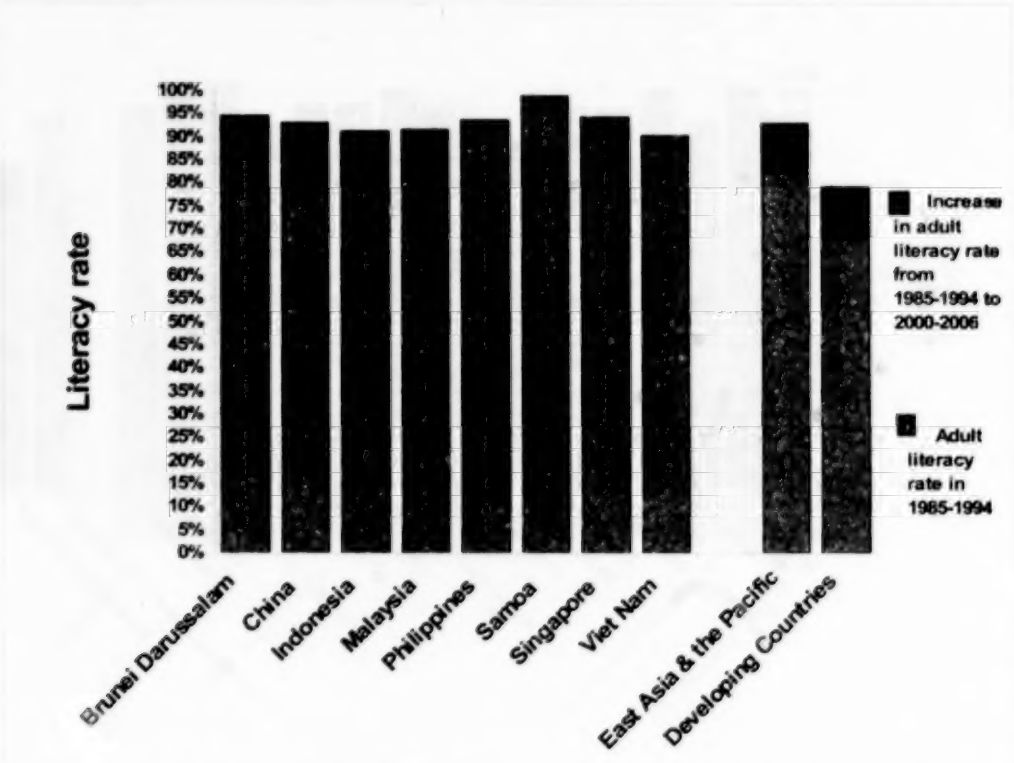


Figure 5
Increase over time in Latin American and the Caribbean adult literacy rate

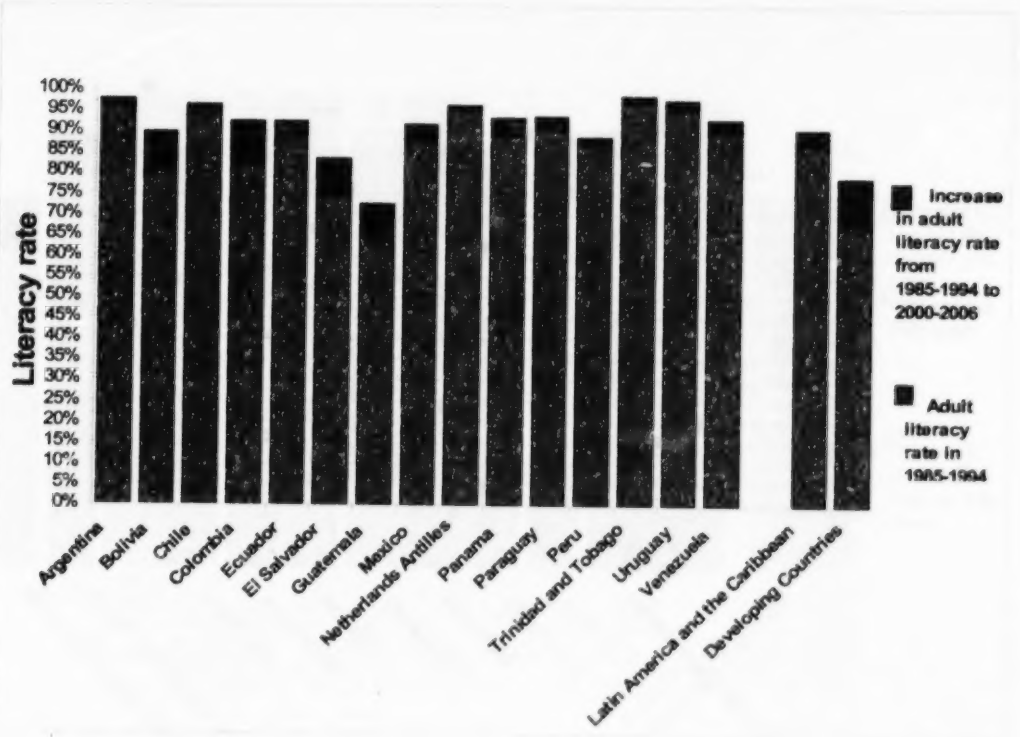


Figure 6
Increase over time in South and West Asian adult literacy rate

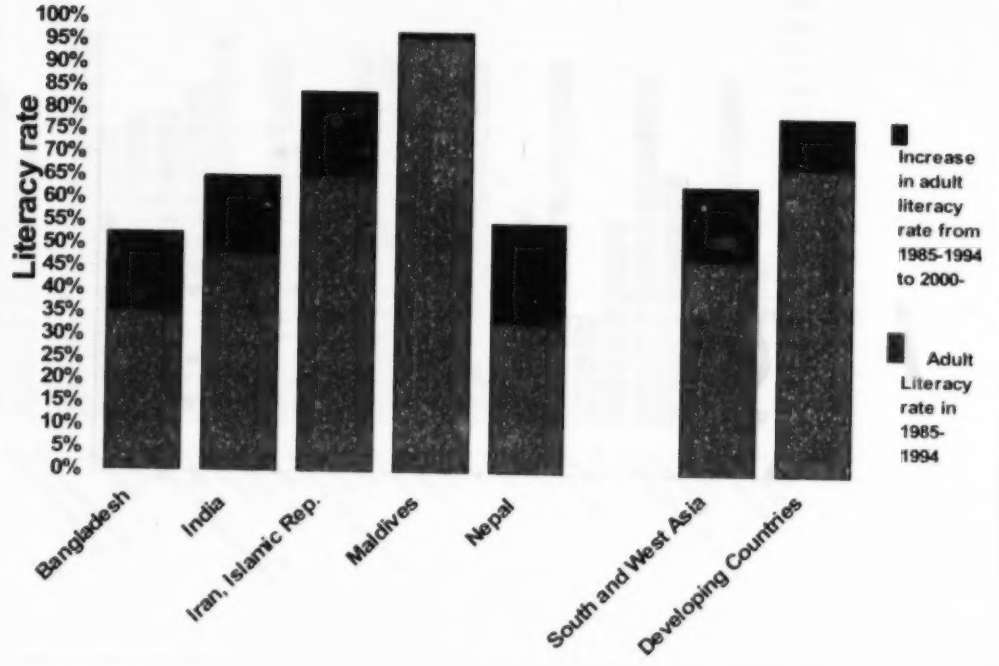


Figure 7
Increase over time in sub-Saharan African adult literacy rate